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UNIVERSITY OF ALBERTA

THE OPINIONS OF NATIVE AND NON-NATIVE EDMONTON HIGH SCHOOL STUDENTS ON FACTORS INFLUENCING CAREER DECISION MAKING

by

Carl M. Paproski

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENT

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA
Fall, 1990

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ABSTRACT

This investigation endeavoured to determine, by means of a questionnaire-survey method, the opinions of urban Native and non-Native high school students attending Edmonton Public and Separate (Catholic) schools regarding questions pertaining to cultural values and factors influencing career decision making.

The instruments administered in this research included: (1) The newly developed Cultural Value Inventory (CVI), used to measure Native and Anglo cultural values developed from Richardson's (1981) listing of 37 pairs of Native and Anglo value statements, (2) A modified version of the Career Factor Checklist (CFC) introduced by O'Neil and his associates (1978, 1980 a & b) to measure opinions regarding the influence of six major factors considered to affect career decision making; familial, societal, individual, socioeconomic, situational and psychosocial-emotional, (3) A background information questionnaire to obtain data from respondents on variables such as: grade, parental occupation, Native status and living experiences on an Indian reserve or Metis settlement.

The sample providing usable data included 137 Native and 148 randomly sampled non-Native students attending grade 10, 11 or 12 classes in one of ten Edmonton Public or Separate high schools. These data were treated statistically to determine the presence of significant differences.

Some of the conclusions were:

1. There are no significant differences between opinions of Native and non-Native Edmonton high school students on Native and Anglo cultural value statements obtained from the CVI.
2. There are no significant differences between opinions of Edmonton (a) Native and non-Native students, (b) Native and non-Native male students, (c) Native and non-Native female students, (d) Native students who had or had not lived on a reserve or Metis settlement, and (e) Indian and Metis students on the importance of the 6 CFC factors influencing career decision making.

Both Native and non-Native students emphasised the importance of the Individual major factor and deemphasised the impact of external, environmental factors.

Native and non-Native students agreed on the three highest "no effect" subfactors but the Native sample was more aware of the importance of various Socioeconomic and Psychosocial-Emotional subfactors influencing their career decision making.

Those assisting Native and non-Native students in their career development are provided with recommendations as well as suggestions for additional research.

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CHAPTER I

INTRODUCTION

The Problem

Context of the Problem

The process of career decision making has been viewed as a very complex phenomenon drawing from many disciplines including the fields of psychology, sociology, anthropology, economics and history. Research has shown that a number of factors play a role in career choice through a complex matrix of interchanging variables. Career developmental theorists have emphasized different factors and correlates in determining and explaining their theories. These theorists include Roe (1957), Super (1957), Holland (1959), Bordin et al. (1963) and Krumboltz (1979).

According to Crites (1969), the correlates of the career decision making process are factors that affect the selection of a career. Among the many correlates, he describes as impinging on individuals in the throes of career decision making are culture, social class, race, geographical region, community, family, school, church, aptitudes, interests and personality. Although he theorizes on their role and functions, Crites believes there is limited empirical evidence on the correlates of career decision making.

O'Neil et al. (1980b), underscored the need for more empirical research to identify the correlates that may inhibit career choice and how further understanding and validation of these correlates will help in counselling clients:

> The identification, understanding and empirical validation of the correlates affecting career decision making can facilitate the diagnosis of clients' problems in career counselling and the implementation of effective counselling interventions. Additionally, if the correlates can be understood in terms of their sex and grade level difference, counselling treatments and preventative programs can be developed for men and women at different educational levels. (p. 572)

What is the impact of these correlates as they relate to a specific minority cultural group - native Albertans? Are the correlates of similar importance to those of the general population? Does the culture of native Albertans - values, beliefs, residency, attitudes, customs, opinions, and way of life play a significant role in how native youth view career choice? Do Edmonton Native high school students view career decision making differently than their non-Native peers? Might there be a uniqueness within the Native culture that provides new insight into the opinions of native youth regarding factors important to them in career decision making?

The literature not only emphasizes the need for more empirical research on the correlates of career decision making but also on how they impact on people of various cultures, including Natives. Richardson (1981), Trimble

(1981), Herr and Cramer (1984) in reviewing the literature on counselling the culturally different with respect to career planning, state that there exists a dearth of quality books and articles in this area.

The need for further research also stems from those who question the appropriateness of career developmental theories, models and paradigms for minority groups, including Natives. Axelson (1985) states:

> Most career development theories for the past 30 years have emerged out of mainstream cultural values and realities. Generalization, for the most part, is limited to middle class and white male populations, since those are the groups that are most represented in many occupations and that had the most opportunity for career expression and development..... However, in many ways the experiences of "culturally different" and "culturally distinct" groups have simply been ignored. (p. 216)

The assumption that culture, with its many facets, plays a significant role in career development is not new. Rosenberg (1957) and Crites (1969) have emphasized that culture is a correlate to career decision making. Although the distinct nature of the Native culture is well documented (Bryde, 1971; Richardson, 1981; Trimble, 1981), knowledge of the impact of Native culture on career decision making is lacking.

There does not exist extensive and current research on the career development of Native Albertans and Canadians specifically, and North American Natives in general. The research that does exist is often dated and narrow in scope, emphasizing the career educational approach in bridging the

gap from school to work (Lee and Thomas, 1983; Sabota, 1978).

The need to understand the uniqueness of the cultural background of individuals making career decisions, is well summarized by Hewer (1963) when she offers her caution to all counsellors as they decipher the meaning intended in theory of vocational choice:

> I must have patience and take time with my counsellees so they can resolve what they want to be. Because I know, too, that I am different, I know how meaningless it is for me to impose my values and my way of life on them. (p. 125)

Definition of Terms

To prevent misunderstandings, the following are definitions of key terms that will be referred to throughout this dissertation.

> Career: The course of events which constitutes a life; the sequence of occupations and other life roles which combine to express one's commitment to work in his or her total pattern of self-development; the series of remunerated and non-remunerated positions occupied by a person from adolescence through retirement, of which occupation is only one; includes work- related roles such as those of student, employee, and pensioner together with complimentary avocational, familial, and civic roles. Careers exist only as people pursue them; they are person-centered. (Super, 1976 in Herr and Cramer, 1979, p. 14)

> Career Development: The total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape the career of any given individual; those aspects of an individual's experience which are relevant to personal choice, entry and progress in education, vocational, and avocational pursuits; the process by which one develops and refines such characteristics as self and career identity, planfulness, and career maturity. The lifelong behavioral processes and

the influences on them that lead to one's work values, choice in occupation(s), creation of a career pattern, decision-making style, role integration, self- and career identity, education literacy and related phenomena. Career development proceeds - smoothly, jaggedly, positively, negatively - whether or not career guidance or career education exist. As such career development is not an intervention, but the object of an intervention. (Herr & Cramer, 1977, p. 14)

Career Decision Making is a plan for career development. The process whereby the occurrence of a specific career selection comes to be more probable than any of its possible alternatives.

Career Education: The total effort of public education and the community to help all individuals become familiar with the values of a work oriented society, to integrate these values into their personal value systems, and to implement these values into their lives in such a way that work becomes possible, meaningful and satisfying to each individual. (Hoyt et al., 1974, p. 15)

Career Factor is defined as a score designating familial, societal, individual, socioeconomic, situational and psychosocial-emotional influence on an individual's career decision making and is based on a modified version of O'Neil, Meeker and Borger's. (1978) Career Factor Checklist comprising 6 general factors and 22 subfactors determined to influence career decisions.

Cultural Value is defined by a score designating such elements as attitudes, beliefs, customs and institutions identified as an integral part of a group's social structure (Atkinson, 1983) and is based on the Cultural Value Inventory (CVI), an instrument developed for the purposes of this study, based on 37 pairs of Native and Anglo cultural value statements as determined by Richardson (1981) and modified by the investigator.

Culture refers to the cumulative deposit of knowledge, experience, meanings, beliefs, values, attitudes, religions, concepts of self, the universe and self-universe, relationships, hierarchies of status, role expectations, spatial relations and time concepts acquired by a large group of people in the course of generations through individual and group striving. Culture

manifests itself both in patterns of language and thought and forms of activity and behavior. These patterns become models for common adaptive acts and styles of expressive behavior, which enable people to live in a society within a given geographical environment at a given state of technical development. (Porter & Somover, 1976, p. 7)

Ethnicity refers to a group classification in which the members share a unique social and cultural heritage passed on from one generation to the next. (Rose, 1964 in Atkinson, 1983, p. 4)

Indian - Non-Status refers to Indians who are Native by birth and heritage but who are not classified as "Indian" under the terms of the Indian Act. (Alberta Education, 1989, p. 21)

Indian - Status or Treaty: "Status Indian" or "Treaty Indian" are used interchangeably. A Status Indian is one who, pursuant to the Indian Act, is registered as an Indian or is entitled to be registered as an Indian (Alberta Education, 1989, p. 21)

Metis refers to a person of a mixed Indian and non-Indian union who is not registered as an Indian under the Indian act (Alberta Education, 1989, p. 21)

Minority: A group of people who, because of physical or cultural characteristics, are singled out from the others in the society in which they live, for differential and unequal treatment, and who therefore regard themselves as objects of collective discrimination. (Wirth, 1945, in Atkinson, 1983, p. 8)

Native: A collective term for the Indians, Metis and Inuit of North America.

Socioeconomic Status is defined as a score designating social class/level and is based on Pineo and Porter's (1967) Occupational Prestige Scale for Canada.

The Nature of Opinion and Attitude

This study was conducted to determine the opinions of Edmonton Native and non-Native high school students on factors influencing career decision making.

The term "opinion" rather than "attitude" was selected even though differentiating between them is a complex phenomenon (Backstrom and Hursh, 1963; Brosseau, 1973). Some confusion and misunderstanding exists between the two terms. Best (1959) states:

> How an individual feels, or what he believes, is his attitude. But it is difficult, if not impossible, to describe and measure attitude. The researcher must depend upon what the individual says as to his beliefs and feelings. This is the area of opinion. Through the use of questions, or by getting an individual's expressed reaction to statements, a sample of his opinion is obtained. From this statement of opinion may be inferred or estimated, his attitude - what he really believes. (p. 155)

Hovland and Rosenberg (1960) agree with Best. They say that opinion is a measurable cognition, distinct from attitude, which is an intervening variable that is difficult to measure. According to Best (1959), there is no sure way of measuring attitude, however the description and measurement of opinion is very much related to the real feeling or attitude of an individual. Remmers (1954) summarizes succinctly:

> In most measurement of attitudes, we are really measuring opinions. Opinions, therefore are expressed attitudes. (p. 7)

The Purpose of the Research

Numerous theories of career development have focused on the importance of internal and external factors on the career decision making process. (Crites, 1969; Holland, 1973; Roe, 1957; Super, 1957). These and other theorists (O'Neil et al., 1978, 1980 a,b; O'Neil and Bush, 1980)

postulate that a number of factors assist or thwart one's life career aspirations, planning and attainment. Included among the many factors are Familial, Societal, Individual, Socioeconomic, Situational and Psychosocial-emotional factors.

Sue (1981), Osipow (1983), Dillard (1983), Herr and Cramer (1984) and Axelson (1985) have studied the impact of internal and external factors on the personal, social and career development of minority group members including women and Native people. They contend that minority groups possess specific unique cultural and other factors important to their members that must be considered in their career development. More specifically, Native population studies have reported culture and other factors, significantly different to the general population, that may contribute to the career development of its members (Bryde, 1971; Darou, 1987; Kluckhohn and Strodtbeck, 1961; Matheson, 1986; Richardson, 1981; Sue, 1981; Trimble, 1976, 1977).

Studies investigating career decision making in the Native population and instruments to measure factors that may influence this process for minority group members are scarce. Concerned that women identify factors that may influence their sex-role learning process and consequent career choices O'Neil, Meeker and Borgers (1978), O'Neil and Bush (1978) and O'Neil and Ohlde (1978) developed an operational and preventative model that assists women and those counselling and teaching women in these processes.

They developed the Career Factor Checklist (CFC), a comprehensive survey questionnaire incorporating a number of career factors that were shown to influence career decision making in women. Their findings reveal that women, who some regard as possessing minority group characteristics (Axelson, 1985 and Sue, 1981), perceive some factors as positive influences and some factors as detrimental barriers to career choice.

From the review of the literature, inferences may be drawn that the six general factors and the 22 subfactors outlined by O'Neil et al. (1978) may play a unique and different role in the career decision making of Native people compared to that of the general population.

The main purpose of this study is two-fold:

(1) to determine the degree of cultural distinction between Native and non-Native high school students in Edmonton and

(2) to compare the opinions of Edmonton Native and non-Native high school students on the importance of a number of factors determined to influence career decision making.

The Questions of the Research

In order to carry out the purpose of the study the major questions in guiding this inquiry are:

(1) Do cultural differences exist between Edmonton Native and non-Native high school students?

(2) Do Edmonton Native and non-Native high school students differ in their opinions of factors that influence their career decision making?

(3) Do male and female high school students have differing opinions on factors influencing career choice?

(4) Do Metis and Indian urban high school students differ in their opinions of factors that influence their career decision making?

(5) Do Native students who have had the cultural experience of living on a reserve, Metis colony or both differ in their opinion of factors influencing career choice from Native students who have not had this experience?

In an attempt to answer the first major question pertaining to cultural differences between Native and non-Native high school students, the investigator developed the Cultural Value Inventory (CVI) (Appendix A). Richardson, (1981) studying American Native culture, formulated a list of 37 different sets of Native and Anglo value statements. Attributing differences in values to ethnic and cultural factors he developed 37 pairs of opposite value statements between Natives and Anglos. Richardson's emphasis that values are a significant distinguishing cultural feature is confirmed by Bryde (1971) and Trimble (1981). The investigator, after consultation with members of Edmonton's Native community, concluded that with modifications Richardson's value statements could be incorporated into a

scaled questionnaire. Some of the terminology that Richardson considered appropriate was modified due to feedback from educators and members of Edmonton's Native community in that the terminology used could be misconstrued or lead to misinterpretation. Specific details regarding the CVI are presented in the instrument section of this dissertation.

The answers to the remaining major questions will be obtained from data collected on the modified Career Factor Checklist (CFC), (Appendix B). The CFC was selected by the investigator as most appropriate for the purposes of this study, due to the inclusion of the 28 comprehensive factors determined to influence career decision making. Comparative analyses will involve the total samples of Native and non-Native Edmonton high school students on each of the six general factors and the 22 subfactors which comprise the CFC. Additional detail regarding the CFC is provided under the instrument section of this dissertation.

Significance of the Study

The present study will add new knowledge about factors which influence the career decision making of Native and non-Native Edmonton high school students. This knowledge may provide new understanding of a segment of the Native population, Edmonton Native high school students, as well as high school students from the general Edmonton population.

In addition, the findings from this study may assist school counsellors to comprehend better the multiplicity of factors that impinge on Native and non-Native students during the process of career decision making.

Finally, the findings from this research may assist parents, educators, and helping professionals in developing new strategies of career guidance for youth.

CHAPTER II

REVIEW OF RELATED LITERATURE

Theories of Career Development

In making career decisions there are many factors that guide, assist, thwart or block goal attainment. This unit of the review of the literature will attempt to unravel the complexities involved in career choice. There seems to be one general agreement among theorists and researchers and that is that a multiplicity of internal and external factors impinge on individuals in the career decision making process.

Various theories of career development and career decision making, in their formulation and description, have led to an improved understanding of the complexities involved in these processes. These theories have provided comprehensive principles that have led to the formulation of testable hypotheses for research. To exemplify the degree of the divergence in these areas of research the following section will attempt to peruse some of these different approaches.

In this unit, some of the theories of career development and career choice which have been formulated to explain how and why individuals choose career pathways will be discussed. Theories will be broadly classified as non-psychological and psychological.

Non-Psychological Theories of Career Choice

The non-psychological theories of career choice are those which emphasize external influences in ultimate decision making and choice. Internal characteristics such as personality, ability and interests are not considered to be either directly or indirectly related to choice. The individual selects a career exclusively due to functioning environmental factors. Three primary theories evolve from this emphasis; (1) chance, (2) economic and (3) sociological.

The chance or accident theory of career choice has been proposed by Caplow (1959), Crites (1969) and Herr and Cramer (1984). The underlying assumption of this theory of career choice stresses the direct influence of chance happenings; the falling into a job; and the being at the right place at the right time as the major influences on career decision making.

Economic theorists believe that choice depends upon the operation of several factors in the labor market. Those factors may be the supply and demand of jobs; the economic impact occupations are perceived to have for a job seeker at the time of decision making; and the cost of prerequisite education and training to qualify for certain careers. The underlying assumption that the individual has perfect freedom to choose a career path is discounted by those emphasizing the economic theory of career choice (Crites, 1969; Herr and Cramer, 1984; Osipow, 1983).

According to Osipow (1983), theorists ascribing to the sociological orientation to career decision making believe that the principal task confronting individuals in career choice is to develop appropriate techniques to cope with environmental influences. The sociological perspective stresses environmental circumstances beyond the control of individuals that contribute significantly to career decision making. Lipsett (1962) contends that career decision making is influenced by sociological factors such as socioeconomic status, social class, culture, education, and family interaction. Dresch (1979) identifies other sociological variables important to career choice such as parental education, occupation and income, family background and experiences gained in education and work.

Crites (1969) identified ten "stimulus" or sociological variables influencing career choice. They include culture, subculture, social class, racial background, geographic region, community, immediate environment, family, school and church. The "Social Learning Theory" of career selection developed by Krumboltz (1979) identifies similar sociological variables that influence career decision making.

Psychological Theories of Career Choice

Psychological theories of choice share a common assumption that individuals have some freedom in the choice of a career. In contrast to non-psychological theories of career choice these focus more upon the individual as the

crucial variable in the career decision making process. These theories posit that the characteristics or the functioning of the individual determines choice and that career choice is only indirectly influenced by the environment in which he or she lives.

Many types of psychological career decision making theories have been developed. "Trait and factor" theory emphasizes the relationship of an individual's personal characteristics to his selection of an occupation. This approach involves a straight forward matching of an individual's abilities and interests with career opportunities. Once this matching occurs the problem of career choice for that person is solved.

Another type of psychological theory of career choice has been defined as "psychodynamic" (Crites, 1969). Crites suggests that in these theories the most significant factor in the making of a career choice is a motivational or process variable. These theories emphasize the inferred states or conditions which prompt individuals to act in a certain direction. Bordin et al. (1963) emphasize the psychoanalytic approach to career choice. Ginzberg et al (1951) presented a theory of career choice that was a first approach to a general theory of career development. His theory was a first attempt at explaining career decision making from an emphasis of ego psychology. He stated that occupational choice was a process generally irreversible, and that compromise was an important part of every choice.

He viewed occupational decision making as divided into three stages; fantasy, tentative choice and realistic choice. Choices were selected due to the influence of childhood factors, interests, values, preferences, training opportunities and job market exposure.

Roe (1957) emphasized the psychological need theory of choice which gave primary attention to the desires and wants of an individual which then stimulate that person to prefer one occupation to another. She emphasized the developmental view by hypothesizing about the relationships between early childhood experiences and attitudes, abilities, interests and other personality factors which would then affect the ultimate career selection of an individual. She believed that childhood influences intensify need fulfillment resulting in increased motivation to career choice.

Self-theories of career choice are another type of psychological theory. Super (1957) in his comprehensive theory of career development, believed that it was a process summed up in a series of life stages characterized as those of "growth", "exploration", "establishment", "maintenance" and "decline". In turn, these stages were subdivided. The process of career development, he believes, is essentially that of developing and implementing a self-concept. Super underscored the influence of social, emotional and intellectual factors in career choice.

Holland's (1959) theory assumes that at the time of career choice, the individual is a product of the

intervention of his heredity with cultural and personal forces which affect his habitual methods of behaving. Holland's theory is offered in terms of occupational environments and the interaction of the individual with his or her environment. He believes that in North American culture, people can be categorized as one of six personality types: realistic, intellectual, social, conventional, enterprising, and artistic. Holland contends that there are six corresponding kinds of environments. His thesis is that in order for people to experience their attitudes and values and exercise their skills and abilities, people will search for the appropriate environment and career. In essence, Holland believes a person's behavior can be explained by the interaction of his personality pattern and his environment.

It is important to note that most trait and factor and psychodynamic theories of career choice assume that choice takes place at a specific point in time rather than over a duration of time. The developmental theories of choice such as those of Ginzberg et al, (1951); Super, (1957); and Holland (1959) propose that career decision making is made at a number of different points in an individual's life.

Another variety of psychological theories of career choice are those which utilize decision models or paradigms to conceptualize the choice process. Their primary emphasis is on the process of decision making.

Gelatt (1962) contends that when confronted with a set of alternatives for a career decision making problem, the

individual (1) estimates the probabilities of success associated with the outcomes of alternative courses of action; (2) views the desirability of these outcomes in terms of his or her value system; and (3) selects a course of action by application of an evaluative criterion. Information is the "fuel" for the decision maker and decision outcomes may be "terminal" or "investigatory" in which case the process will begin again.

Hilton (1962), in a more complex conceptualization of the decision making process, believes the principal variable in this process is cognitive dissonance. The concept is different from that of cognitive dissonance as introduced by Festinger (1962). Where Festinger states that dissonance always follows choice, Hilton believes efforts to reduce dissonance precedes and aides decision making. Osipow (1983) believes Hilton's decision making process would follow in this fashion. Some event stimulates an individual's attention to the need to make a career decision. The stimulus may be a different job offer; personal economic difficulty; or the desire to relocate to a new geographic area. If the dissonance introduced by this stimulus is too great and cannot be tolerated, the individual may re-examine his values or beliefs towards himself and the world of work and change his job. According to Osipow, it is of major importance to identify the factors which can increase career dissonance. The potential variety of factors that may yield dissonance is immense yet career

counsellors must develop strategies to deal with all of them (Osipow, 1983).

Herr and Cramer (1984) allude to the "expectancy" theories of Vroom (1964) and Lawler (1973). Concepts such as valence and expectancy refer to personal reflection as to whether movement to a choice will be positive or negative. In addition these concepts refer to whether the outcome will be positive or negative to the individual. The motivation to action and the perception of the personal outcomes result in a movement to choose or not to choose.

Bandura (1977), in explaining his theory of learning and behavior change, refers to the influence of "self-efficacy" motives. Bandura contends that behavior changes, which are ultimately decisions made, are a direct result of expectations of self-efficacy - expectations that one can perform a given behavior.

An additional theory of decision making has been developed from the concepts of problem solving or scientific analysis. Bergland (1974) states the sequence of events in decision making would be (1) defining a problem, (2) generating alternatives, (3) gathering information, (4) processing information, (5) making plans and selecting goals, and (6) implementing and evaluating goals.

Career Decision Making Factors

The following section of the review of the literature and research will focus on specific factors shown to be influential in determining career decisions. This section will be divided into six units with each unit focusing on one of the major career decision making influences as outlined by O'Neil et al. (1978, 1980a,b); familial, societal, individual, socioeconomic, situational and psychosocial-emotional barriers.

Familial Factor

This factor encompasses experiences in and from the family that help shape values, attitudes and behaviors. Bratcher (1982), in developing his theory on the influence of the family on career selection states:

> Most writers in the field recognize, though at times only indirectly or implicitly, the influence of the family on the choice of one's career. There remains however, a significant gap in the literature in the area of attempting to understand this influence (p. 87)

Several career developmental theorists believe that the family plays a fundamental role in the shaping of career choices (Ginzberg et al. 1951; Holland, 1973; Roe, 1957; Super, 1957). Bordin et al. (1963) postulate that the first six years are critical to both personality development and the development of needs that are expressed later in life. Roe (1957) suggests that parental attitudes and family environment may predict career choices. Holland (1973)

argues that parental behavior creates environments which exert a powerful influence on the personal characteristics of their offspring and that one consequence of this influence is the particular vocational environment the children select.

Gushurst (1972), in his analysis of Adlerian psychology, views the importance of "lifestyle" to vocational choice. He underscores the impact of such facets as birth order, comparative sibling characteristics and interaction, and parental characteristics and interaction with both themselves and their children on many areas of life including occupational choice.

Krumboltz (1979) elucidates on his "social learning theory" as another step toward understanding more precisely which specific kinds of learning experiences contribute to the development of occupational preferences. This theory "identifies the interaction of genetic factors, environmental conditions, learning experiences, cognitive and emotional responses and performance skills that produce movement along one career path or another". (p. 19) Munley (1977) reviewed Erikson's theory of psychosocial development and its impact on career development. Erikson postulates that the role of parent is very important in the development of eight stages of ego growth. Munley believes that Erikson's theory provides a broad overview of human development which may serve as a frame of reference for the process of career development.

The general theories are clear in their delineation of the importance of parents in various aspects of career development. Hundreds of studies verify parental importance.

Hollingshead (1949) stated that adolescents tend to choose occupations with which they are familiar because their parents and their parents' friends are in them. Vigod (1973) confirmed the direct relationship between occupational choice and parental occupation.

Gutek and Nieva (1979), Alberts et al. (1982) and Sadker and Sadker (1982) are researchers who emphasize the tremendous impact of parents on the sex role and occupational stereotyping of children as early as kindergarten age.

Dillard and Campbell (1981) examined the relationship between Puerto Rican, Black and Anglo adolescent children's career aspirations, expectations and maturity, and their parents' career values and career aspirations for their children. The findings suggest that the aspirations that some parents hold for their children are influences in adolescents' "vocationalization".

The role of the parent in the career development of special needs individuals has been researched as well. Brolin (1976) comments that parents are very significant in the development of the mentally retarded individual's "work personality" which he defines as "those unique individual abilities and needs which are highly dependent on genetic

and environmental factors and their interaction". (p. 27) In a comprehensive text pertaining to the career development and general development of high school students with physical disabilities, Foster et al. (1978) referred extensively to the role parents should play in the career decision making of their children. Hoyt (1974, 1975), among others, proposes numerous suggestions for parents in assisting in the career development of their children.

Societal Factor

Societal factors which are external to the individual represent the collective influence of values, attitudes and behaviors that exist in society. These societal influences such as educational experiences, peer influence and mass media affect the individual's perception of the appropriateness of career options and therefore, impact on career decision making.

It has been documented that learning institutions, their teachers and counsellors play a significant role in career choice. Education with its formal organization and pervasive philosophies contribute to the holistic development of its students including career development.

Hoyt et al. (1973) states that too often education simply prepares its students for more education instead of focusing on life careers. Osipow (1973) and Herr and Cramer (1984) emphasize the need for teachers to be aware of their role in the career development of students. Evidence has

shown that teachers do not realize the importance of career development to their students and their interested parents.

The Canadian Government (1978) initiated a survey of 3,000 high school students, teachers and parents concerning the role of education in preparing young people for career choice. Asked to list what they consider to be the school's most important goals, the students ranked the abilities and skills needed for employment as third on their list. In contrast, the teachers relegated this to 38th position.

Career education, a process that regards the importance of career development in total human development, has become an aid in career decision making for students (Hoyt; 1974, 1975). The Alberta Government, as recently as 1989, incorporated career education into the curriculum for all students in the province from grades 1 to 12 by developing a "career and life management" program. This program assists students at all grade levels with career awareness, career exploration, and career preparation, emphases stressed by Hoyt in the late seventies.

The role of the school counsellor in the career development of students developed and solidified in the 1980's. Since Wrenn (1962) emphasized the importance of counselling to career planning and choice, University counselling programs have incorporated career developmental theory in their programs. Herr and Cramer (1984) and others continue to emphasize the importance of personal and group counselling, as well as career guidance, for individuals making career choices.

Herr and Cramer (1984) in discussing the process of career decision making in adolescence, cite numerous studies that provide evidence of how unique types of counselling and career guidance strategies impact on high school students. They provide examples from research that indicate reinforcement-behavioral counselling, modeling, imitative learning, and filmed and audiotaped presentations of specific stimulus materials influence career decision making and information seeking behavior among high school students. They also demonstrate that sex, age and other characteristics are related to the effects of these approaches.

Peer group influences are those experiences with friends, both female and male, that may affect career decision making. Crites (1969) cites peers as an influence in career choice but suggests that further research is required to identify between peer pressure and family influences. Breton (1972) found that parents and members of the school faculty have more impact than friends in the career decision making among boys. With respect to girls, friends appeared to have the most influence and parents the least.

Influences of mass media sources such as radio, television and magazines may affect career decision making. Bandura and Walters (1963) believe that modelling is important to the acquisition of behaviors. It is difficult to assess what an individual learns from various forms of

the print and electronic media. Stereotypical views of individuals or groups in society, such as the role of women or descriptors of minority groups, may be learned and accepted with possible influences on career choice. (Alberta Education, 1989; Alberts et al. 1982).

The Alberta Committee on Tolerance and Understanding (ALTA, 1984) alluded to the cultural bias and stereotypes prevalent in school curricula. They refer to a 1982 Alberta Education report that concluded that 60% of the Provincial curriculum was biased, out-dated, or stereotypical of Native people. The Committee questioned the problems of omission in the curriculum as well. Their conclusion was that the curriculum had little to say about the history, philosophy, achievement and challenges of the Native peoples.

> These culturally relevant perspectives are essential because these are the realities that make up the Native students' past, present and future. By omitting these perspectives, self-esteem is undermined just as surely by having to attend exclusively to other peoples' history, experience and priorities, as it is by derogatory stereotyping.
>
> (ALTA, 1984, p. 130)

Greene et al. (1982) studied the effects of reading career material containing non-traditional role models. Among their conclusions, was one indicating that student attitudes toward sex-typed careers can be changed by exposure to career information containing non-traditional role models. The short duration of the treatment, twenty minutes, led the researchers to surmise that a regular instructional program that incorporates non-stereotyped

information and a wide range of appealing role models working in a variety of careers could possibly have a stronger, lasting effect on student attitudes about their career options.

Individual Factor

Individual factors are those internal personality characteristics which describe a person. The individual factors provide a means of internalizing the sociological influences of the familial and societal factors (O'Neil et al. 1978). That career choice is highly intuitive and personal involving many components is illustrated by Morris (1969):

> The choice is yours, and so is the challenge. The choice must not be made by your parents, not by your teachers, nor by your friends. The choice must not be made in the light only of your abilities, your interests or your personality. It must be made by the whole you, the complete person, living in a responding and demanding society. (p. 69)

Self expectancies, abilities, values, needs and attitudes are but some of the individual factors important in the career decision making process. Elkins (1975) found that college freshmen were not aware of the many factors that may influence career choice.

Crites (1969), Huff (1974), and O'Neil et al. (1978) are among those who have investigated the numerous individual factors that contribute to career choice. Although the list of factors is lengthy they deserve mention: need for security, ability to do the job, knowledge

of the job, opportunity for personal advancement, social prestige, friendliness, excitement, benefit to others, interests, satisfaction, happiness, self-fulfillment, enjoyment, self-actualization, aptitudes, job location and personality characteristics. In rating the importance of these factors on career choice, student opinion varies with age, grade and sex of the respondent.

Powell and Bloom (1962), in researching the opinions of 929 Grade 10 and 12 students, found that although the factor "interests" ranked important for both groups, it became more important for Grade 12 students.

Osipow (1983) believes that behavioral correlates of values, which are intrinsic beliefs, are important and the forces that shape them are important in the study of career development.

Pine and Innis (1987), in a recent review of the literature on culture and individual work values state:

> How a person views or observes the world of work will be largely influenced by implicit conceptions of his or her own society and the individual plan in it. (p. 285)

They stress that individual work values have a direct relationship to social and cultural forces and that these influences are too frequently discounted by career developmental theorists. They provide evidence of how the personal view of the world of work is largely determined by how the self views the complicated economic and social system in which it resides.

Implicit in Roe's (1957) personality theory of career development is that need satisfaction, influenced by early childhood experiences, stimulates an increase in motivation towards certain career choices. Hoppock (1957) expanded the need approach to that of career development in his theory of occupational choice. He hypothesized that the adequacy of occupational choice improves as people are better able to identify their own needs and the potential needs satisfaction offered by a particular occupation.

Holland's (1973) theory leads to the prediction that individuals will choose occupations consistent with their personal orientations. According to his theory, career choices represent an extension of personality and an attempt to implement personal orientation and behavior in the context of one's life career. He believes that through self-knowledge, self-evaluation and knowledge of the world of work, people can project themselves into certain occupational areas. He defines six personality types implicitly tied to certain occupational groupings.

Implicit in Super's (1957) theory of career development is the motive that people strive to implement their self-concept by choosing to enter the occupation seen as most likely to permit self-expression. He believes that behavior, including career choice, is a reflection of an individual's attempt to implement his self-description and self-evaluative thought. Factors such as interests, attitudes and abilities play important roles in Super's theory of career choice.

Socioeconomic Factor

Socioeconomic factors outlined in this unit relate directly to one's social, ethnic, racial or minority group membership and to the economic situation in society. Crites (1969) discusses these factors as culture, sociological and economic facets of career choice. Osipow (1983) describes them as social system variables. Unruh (1979) states:

> Much of what humans learn is achieved vicariously from the experiences of others who are like them and who therefore share their experiences and are subject to similar restrictions and opportunities. (p. 15)

Lipsett (1962) identified a number of social class variables, among them race, sex, marital status, family income, and family residence that influence career choice.

Crites (1969), Hurst (1979), VanFossen (1979), and Osipow (1983) refer to the impact of social class membership and social class consciousness on thoughts, actions, and choices including career choice. Due to social class, the individual learns that certain kinds of work are more socially desirable than others. Hollingshead (1949) in referring to career choice in adolescents state:

> The pattern of vocational choices corresponds roughly with the job patterns associated with each class in the adult's work world. Therefore, we believe that the adolescent's ideas of desirable jobs are a reflection of their experience in the class and family culture complexes (1949, p. 285).

Lewis (1966) believes that membership in a group that has been poor for generations constitutes belonging to a separate culture - the culture of poverty.

> The culture of poverty is not just a matter of deprivation or disorganization, a term signifying the absence of something. It is a culture in the traditional anthropological sense in that it provides human beings with a design for living, with a ready-made set of solutions for human problems, and so serves a significant adaptive function (1966, p. 3).

Culture, involving its many components including lifestyle, beliefs, values and child rearing practices, has been shown to play a role in career development. Rosenberg (1957) noted that occupational choice is not a value itself but the decision is based on the values of the individual stemming from culture.

Caplow (1959) believes that regardless of age and time of occurrence, one's culture governs the crystallization of vocational choices. Osipow (1983), Dillard (1983), Herr and Cramer (1984), and Axelson (1985) share how career development theories are influenced by culture. Trimble (1977, 1981, 1989), Richardson (1981) and Sue (1981) are researchers who espouse the need for understanding the many facets of minority culture and how cultural components play a significant role in personal, social and career development. Sue (1981)and Axelson (1985) have developed hypotheses on how race and minority status interact with social class, career aspirations, opportunities and, ultimately, career attainment.

Smith (1975) in reviewing the profiles of the black individual in vocational literature concluded that very little information exists about the career decision making of Blacks. Smith and Axelson (1985) both concur that most

career development theories are based on white middle-class males.

Matheson (1986), Karayanni (1987), and Darou (1987) agree that counsellors must heed the linguistic and cultural factors that influence career planning. Hansen (1987), in an exhaustive review of cross-cultural research on vocational interests, believes that the limited relevancy of some career theories and interest inventories for cross-cultural groups may be more a function of lower socioeconomic status than of cultural background.

Sundahl-Hansen (1985) presents five new directions to career practitioners developed from the many recent cross-cultural trends. She stresses the need to implement new career counselling strategies and holistic career development programs to meet the many changes across cultures. West's (1988) study provides evidence that questions the construct validity of career development instruments as they pertain to minority group members.

Sue (1981) and Axelson (1985) are two authors among many who emphasize the impact of racial discrimination on career decision making. In reviewing the literature on a number of minority groups they underscore the impact of overt and covert discriminatory practices in perceived and real terms with respect to career decision making. Braddock and McPartland (1987) undertook a comprehensive examination of discrimination by employers in hiring employees from minority groups. The research gathered from 4078 employers

provides evidence that shows discrimination between whites, blacks and other minorities at three stages of the employment process; the job candidate stage, the job entry stage and the job promotion stage. Their research gives a number of exclusionary barriers to employment for minorities.

Bohan (1987), investigating the concept of "reverse discrimination" states:

> Nowhere is the resentment against minorities in the work place more evident than in occupations formally the virtual domain of the white male. (p. 1)

Bohan (1987) believes that minority students are indoctrinated by educators and industry personnel with comments that white males are "losing ground" in the once white only career areas. He statistically analyzed data gathered by the Native American Career Foundation in Natural Resources Program (NACNER) at Humbolt State University in California. His analyses included data collected by NACNER of hiring practices of state and Federal agencies that employ natural resource professionals in 1985. Despite the outrage by white males in the natural resource fields at personal inequities in hiring practices which in their minds favored minorities, the evidence did not support these claims. In fact, 94% of new hirees in 1984 and 1985 were white and the numbers hired were low enough that minorities were kept 73% below proportional representation. Bohan concludes that perpetuating the myth of reverse discrimination is a major barrier to employment opportunities for minorities and:

> Educators who not only espouse the doctrine of reverse discrimination but also allow it to be proclaimed in their classrooms without knowledge of the facts are guilty of covert racism if not simply unconscious racism (1987, p. 4).

The existence of sex discrimination against women in general, and minority group women specifically, in terms of employment, advancement and pay is widely documented (Alberts et al. 1982; Axelson, 1985; Sadker and Sadker, 1982; and Sue, 1981). Although federal and provincial human rights laws have been enacted in Canada, women in general and minority group females specifically, are frequently excluded from employment, thwarted in their career choices and receive discriminatory pay in comparison to their male colleagues.

As early as 1969, Zytowski presented nine postulates in an attempt to characterize the distinctive differences in the work life of men and women. He describes the developmental stages unique to women, their patterns of vocational participation and the determinants of these patterns.

Studies suggest that even counselling may limit the career alternatives of women clients. Medvene and Collins (1976) studied the attitudes of secondary school counsellors, psychotherapists and advanced graduate students. Having all three groups rate the appropriateness for women for 25 different occupations, 90% of the male school counsellors rated no more than 10 of the 25 occupations appropriate for women. Ahrons (1976) in another

study of counsellors, concluded that career goals for women were perceived by the counsellors as being incompatible with the role of wife and mother, showing a home-career conflict.

One final socioeconomic factor critical to an individual's attempt to plan and implement a career is the supply and demand of jobs. Occupational outlook trends, civic, provincial and federal legislation, international agreements, inflation, geographical location and organized labour may contribute to career opportunities and ultimately career choice (Hurst, 1979; Vanfossen, 1979).

Situational Factor

Chance or unforeseen circumstances are situational factors that may inadvertently affect career decision making (O'Neil et al, 1978). Crites (1969), in reviewing non-psychological theories of career choice, refers to the accident theory of vocational choice. Osipow (1983) refers to being at the right place at the right time as on occasion having significance in determining career choice. Herr and Cramer (1984) citing Bandura's "perspective on factors influencing chance encounters", summarize that chance encounters play a prominent role in shaping people's lives, including career choice. Rotter (1966) studied the concept of "luck" or "chance" as a psychological construct.

In making decisions of any type, including career choices, there is a need to determine how much control one has, or perceives to have, over one's destiny and one's

life. This control has been shown to vary in people of different cultures.

Rotter (1966) proposed the concept of internal and external control or "locus of control". Internal control (IC) refers to people who believe that they can shape their own fate. External control (EC) refers to the belief that what transpires in life occurs independently of their actions and that the future is determined by chance and luck. Rotter concluded that this I-E dimension measures a generalized personality trait that operates across several different situations. The concept stresses that, based on past experience, people learn one of two world views; the locus of control rests with the individual or the locus of control rests with an external force.

High internality, according to Rotter, shows the individual who has greater mastery over his environment. This and other attributes of those in control of their environment and life in general are attributes highly valued by middle class white America. Sue (1981) indicates through his review of the literature on locus on control that ethnic minorities, lower class people and women score significantly higher on the external end of the continuum.

A final situational factor impacting on career choice alluded to by Osipow (1983), involves the course of least resistance. In essence, choice is not involved in career selection but, what occurs is rather a gravitation towards

options which provide the least resistance, hard work or difficulty.

Psychosocial-Emotional Factor

The last general factor discussed in this section of the review of research and literature stems from research by O'Neil and Bush (1978). They speculate that there are a number of factors that restrict, inhibit and impede the career choice process in adult women. Their hypotheses stem from Holland's (1973) theory that career development can be described as an interaction of an individual and his or her environment. They contend that barriers to actual career choice consist of an interaction between an individual's psychological characteristics and the effects of society.

"The interaction of an individual's psychological characteristics and the effects of society on career choice are labelled psychosocial factors." (O'Neil and Bush, 1978, p. 73)

Five psychosocial factors are defined by O'Neil and Bush, who provide a literature review for each factor.

(1) Fear of failure: The fear of failure is the fear of being judged as inadequate, judging one's self as being inadequate or unsuccessful, or fearing that others will see one as unsuccessful.

(2) Fear of success: Arising primarily from the attitudes of male peers, fear of success for adult women implies that success will lead to negative consequences.

(3) Lack of assertiveness: In defining assertiveness, O'Neil and Bush quote Wolpe and Lazarus (1966) "as the expression of feelings in a socially appropriate fashion" and Percell, Berwick and Bergel (1974) "as the spontaneous expression of personal rights and feelings in a socially accepted manner". O'Neil and Bush believe that if an adult woman does not have a sense of her own rights, and the feelings of self worth that go with it, she will probably not be assertive.

(4) Lack of confidence: O'Neil and Bush believe that one of the formidable barriers to an adult woman's career development is her lack of self confidence. They state:

> In our society there is self doubt, subtle depreciation, and built-in bias about the inherent inferiority of women relative to men. These attitudes suggest that women have lower levels of abilities, success rates and potential for achievement in most areas of work. (p. 80)

(5) Role conflict: According to O'Neil and Bush, role conflict is a subjective feeling of frustration where persons are pulled in opposite directions in the performance of their roles.

Native People

In an attempt to better understand Native people and the factors involved in their career decision making, this section will focus on some brief historical comments, Native

demographic data, characteristics of Native culture and career and counselling research pertaining to Natives.

Historical Comments

Frideres (1983), in his excellent contribution to understanding contemporary conflicts of the Native people in Canada, is blunt and direct in his introductory paragraph on how Natives have been treated over the last century:

> The economic and social status of the Canadian Native is characterized by abject poverty. The assistance that has been provided to Native peoples by empowered groups has usually been so minimal that its impact has been negligible. In general, the treatment of Native Canadians has been based on a single ideology - racism." (p. 2)

Frideres (1983) cites numerous examples of racism stemming from what he believes is the Euro-Caucasian colonization of the Native people in Canada. He believes that the treatment of Native people resulting from many discriminatory practices over generations continues to propagate Native-white conflicts and barriers to individual and group expression.

Ponting (1986) also examined the history of Native Canadians and refers to their internal colonization.

> The following are defining characteristics of internal colonization as it has been experienced in Canada: (1) the forced integration of Indians into the larger society; (2) major power differentials structured into the relationship between Indians and the larger society, so that a dominant group controls and administers Indians and makes decisions for Indians; (3) a system of "indirect rule" whereby local Indian leaders act as agents for implementing the policies and decisions of nonIndian powerholders outside the community; (4) racially based barriers to Indians' upward socioeconomic mobility; (5) exploitation of

> Indians for their labour; (6) cultural destruction; and (7) a racist ideology. (p. 394)

Although cautious in his optimism, Ponting gives evidence of some positive changes for the Native population in the last 20 years. He cites demographic changes such as a decline in the death rate of Natives and a six-fold increase of Indians attending postsecondary institutions as two positive trends. In addition, Ponting believes that recent amendments to the Indian Act, a recognition of aboriginal rights and the politicization of Indians are positive signs of decolonization.

In any study that relates to Natives in Alberta, it is necessary to discuss the Metis. The Metis must be considered as a unique people in Canadian Society. While only a small segment of Canadian society, the Metis emerged out of a unique set of social and political conditions and had a significant effect on the political development of Western Canada (Frideres, 1983). The Federal Government no longer identifies the Metis as a separate category, however Alberta keeps official records but only for its Metis colonies. While as Trimble and Fleming (1989) indicate it is fallacious to consider that Metis are characteristically less Indian in terms of knowledge of traditions, mores and folkways, it is important to consider if cultural differences exist between these two groups.

The unique history of the Metis people, the involvement with Provincial and Federal Government legislation and the Metis Settlements of Alberta occupying an area of 1.24

million acres (the only Metis land base in Canada) are three examples of influences that may have resulted in some unique differences between Metis and Indian people. Metis have argued for many years that as a special group, they are entitled to aboriginal rights. The uniqueness of the Metis in Alberta is exemplified in the thoughts of the then president of the Alberta Federation of Metis Settlements Associations in a brief to the Premier of Alberta regarding future discussions about the Canadian Constitution.

> In this statement the Metis Settlements of Alberta identify and define their right to their land and resources, to a distinct political status, and to their own social, cultural and economic development (Metisism, 1982, Introduction).

This brief presents numerous directions to government in the areas of political, cultural, social and economic development, a thrust seen as needed for Metis growth and survival in Alberta. The emphasis regarding cultural development stressed the importance of Metis Education, a distinct Metis language and the need to establish a Native Canadian broadcasting system.

With respect to Metis education, it is enlightening to know that a recent publication (Cardinal & Ripley, 1987) offers to elementary students an excellent overview of the history and cultural development of Metis people in Canada.

Demographic Profile

The demographic information provided in this unit attempts to offer insight into the present circumstances of Native Canadians and Native Albertans as they reside and

work in rural and urban settings, reserves or Metis settlements.

Recent demographic studies provide ample evidence of the continued impact previous treatment and legislation have had on Native Canadians and their culture.

According to Canadian government statistics (Can., 1967), 592 Indian tribes or bands exist in Canada. The total population of Indian, Metis, and Inuit citizens living in Canada according to the 1986 census total approximately 760,000 (Can., 1987). One in twenty of all Albertans is of Native origin, of 2.4 million Albertans in 1986, 104,000 (nearly 15% of Canada's total Native population) were Native. This number includes more than 40,000 registered Indians, many of whom live on Alberta's 42 reserves. The number also includes approximately 60,000 Metis and others of partial Native origins. Only a minority of Metis have a permanent residence in one of the nine official Metis settlements in Alberta. There are fewer than 300 Inuit listed as Alberta residents. The 1981 census showed that the Native population of Alberta as significantly younger than the rest of the population; 54.4% of Natives were under 19, compared to 33% of the non-Native population.

According to Shah (1988) the Native urban migration trend, begun in the 1960's, continues to grow with 7 out of 10 non-status Indians and 6 out of 10 Metis now residing in Canadian urban centres. In Alberta, the largest known concentration of Native residents live in Edmonton and

Calgary. Although the primary reason given by Natives for urban migration is employment, Natives have identified unemployment as their most difficult problem after relocation. In addition, inadequate housing, limited education, alcohol abuse, lack of cultural awareness and discrimination rank as problems facing Natives in urban centres (Shah, 1988).

With respect to earning power, 1980 statistics (Can., 1981) provide eivdence that the average Native income is lower than non-Natives. Native income is about two-thirds of the non-Native average ($8,000.00 compared to $13,000.00). The average income of urban Natives was $9,900 in 1980, about three-quarters of the average for non-Natives living in cities. Fifteen percent of Native men and 32% of Native women over age 15 had no income in 1980. The corresponding proportions for the non-Native population were lower, 7% of the men and 23% of the women (Can., 1981). In 1980, only 9.3% of Natives earned $20,000 or more compared to 23.4% of non-Natives (Alberta, 1989).

A recent symposium pertaining to the health of urban Natives was held in Edmonton in 1988 outlining current conditions:

> ...the Indian population mortality level lags considerably behind the overall Canadian population. Life expectancy at birth, estimated at 62 and 69 years (in 1981) for Indian male and female respectively, is at the same level reached some forty years ago by the overall Canadian population (Shah, 1988, p. 22).

Cardio-vascular disease is the primary cause of death of Native people followed by the category injury and poisonings and then suicide.

The death rate due to injury and poisonings was 4 times that of the Canadian average during the 1980-1985 period. More than 75% of the age group 10 to 20 years old died from this cause. Motor vehicle accidents was the primary cause of death in this area, 3 times the Canadian average; drowning was second, 11 times the Canadian average; fire was third, 9 times the Canadian average followed by overdoses and firearm deaths (Shah, 1988).

The suicide rate for Natives between 1980-85 was three times the Canadian average. Following Saskatchewan with the highest suicide rate in Canada was Alberta with 43.8 deaths per 100,000 people. Indians between 15 years of age and 24 years of age had the highest rate of suicide for any age group (6 times the Canadian average) (Shah, 1988).

Overall, the Native population receives less formal lifetime education than the total population. One in twenty Natives had no formal schooling, compared to one in 100 non-Natives. 30% of Natives compared to 11.3 % of non-Natives had 8 or fewer years of education. Only 2.3% of Natives in Alberta compared to 11.4% of non-Natives have a University education.

Hagan (1974) provides an analysis of the incarceration of Native offenders in Alberta, a Province whose use of incarceration, he alleges, exceeds that of any country in the Western world. Concerned that the prison population in

Canada contains a disproportionate number of offenders with Indian and Metis backgrounds, his analysis focused on the factors that send this particular group of offenders to prisons. The review of the 1971 census data yields evidence that offenders were represented at least 4 times as often among newly incarcerated offenders than in the general population (Hagan, 1974). Friederes (1983) alludes to the continued disproportionate numbers of Natives in the prison system. Hagan in studying Natives in all of Alberta's prisons, determined members of this cultural group were primarly charged with minor offenses and received shorter sentences than non-Native offenders. In the population studied, incarceration for forfeiture in fine payment was nearly twice as common for Native persons as for white. In addition, nearly two-thirds (64.4%) of the Indian and Metis offenders in the sample were serving sentences involving a default in the payment of fines. When the measure of alcohol abuse was cross classified with race, the results indicated that 24% of the white offenders (N=141) and 47.6% of the Native offenders (N=185) had drinking problems. It is noteworthy and encouraging that the Province of Alberta is presently undergoing an extensive review of the judicial system with respect to Native offenders.

Although the Native population views employment as a window for change and hope, evidence persists that high unemployment rates continue. Statistics Canada, in its most recently reported census data, states that Native Canadians

are unemployed 3 to 4 times more than general population (Can., 1987).

According to the 1981 census, over half (51.8%) of all Alberta Natives over 15 years of age were participating in the labour force, compared to nearly three quarters (72.3%) of non-Natives (Alberta, 1989).

The unemployment rate among people of Native origin in recent years has been about 3 times the rate of other Alberta residents (Alberta, 1989). According to the Alberta Government, labour market participation and employment rates for Native people are estimated only. Short employment projects and lifestyles make it difficult to collect accurate statistics. The Native population residing in remote areas have had fewer opportunities for full-time employment near their homes.

As of February 1987, only 206 or 1.1% of all apprentices in Alberta were Native. Of this total, 91 apprentices were in the carpentry trade and no Native apprentices were listed in 35 of the 52 designated trades (Alberta, 1989). Statistics continue to show very few Natives in managerial, administrative and manufacturing occupations. One third of Natives in the labour force were employed in forestry and construction (Alberta, 1989).

Additional research points out that coupled with high employment, Native Canadians continue to be over-represented in unskilled and low paying jobs (Calgary 1984). The

present demographic data and predicted trends are very alarming, when one considers that Alberta's Native population has been shown to be much younger than the general population and is growing at a more rapid rate. It is estimated that 25% of people entering the labour force in 1991 in the prairie provinces will be of aboriginal ancestry (Alberta, 1987).

Millions of federal, provincial and local dollars are spent annually to correct these statistics with little success. Even governments admit failure:

> The Indian, Inuit and Metis people experience the highest rate of unemployment of any group in the country. Not only have Canadian governments failed to provide them with the resources they need for employment, but when programs have been developed, these people have not been consulted with respect to their own needs and views. (Canada, 1981, p. 100)

Native Culture

It has been shown in previous sections of this dissertation that career decision making is a highly subjective process encompassing numerous internal and external factors. Evidence will be presented in this unit that outlines facets of Native development and Native culture. The inclusion of this review will attempt to provide information needed to better understand the career decision making process in Native people, and of the factors that may be involved for them in career choice.

Trimble (1977) provides suggestions and cautions for those doing research with Natives. One suggestion for

involving the Native population in the development and implementation of research has been attempted by the investigator. In order to derive a truer sense of the Native perspective regarding their culture, beliefs and feelings, many Native individuals, Native students and Native educators have been involved in the development of this dissertation.

Trimble (1977) also warns researchers not to generalize or extrapolate research findings as applicable to all Natives. The writer wishes to emphasize that findings from the review of the literature and research studies should not be and cannot be attributed to all Metis, Inuit and Indian throughout North America. Medicine (1988) agrees:

> In my years of teaching, I am constantly amazed that the gloss or images of Native people is so monolithic in the conceptions of the helping professionals which deal with us. A very common theme is the notion that one Native person can represent the over three hundred distinct groups which are still extant in North America (p. 46).

Although Natives have long understood their cultural uniqueness, it is only in this century and mainly in the last 50 years that they have begun to document their cultural history. The aboriginal people on this continent have existed in Canada and the United States for thousands of years, but their ancestors did not document their history. Beliefs, values and their way of life were passed on primarily by word of mouth from generation to generation. Recent writings have clearly emphasized a delineation of specific characteristics unique to Native people.

Culture as previously defined by Porter and Somover (1972) provides a clear and all encompassing description which illustrates how this concept could play a significant role in all facets of life including career choice. Native authors such as Bryde (1971), Richardson (1981), and Couture (1987) postulate that Natives have a unique culture and characteristics. It is only after extensive personal research and study that one can begin, and only begin, to understand the feelings, thoughts and aspirations of this proud historic people.

Matheson (1986) paraphrasing Dr. A. Burke, a noted American historian, expresses the magnitude of misunderstanding, anger and hatred that can be generated by not knowing the culture of the Native people:

> Dr. Burke forms two circles, one representing Indian, the other Euro-American cultures. On the perimeter of the Indian culture he draws representations of animals, trees, rocks, mankind, rivers, etc., and in the centre of the circle something representing Primary Life Force, God, whatever your preference. On the Euro-American he places Man in the centre, all created things along the perimeter and God coming from somewhere outside the circle altogether. Can you imagine even the minimum implications from this conceptual image of our two systems? What follows if you pit one society, whose structure man and brotherhood with all other created things against a society which sees mankind as the centre of the universe with other creation as subservient, as usable and abusable resources? It is natural for the one to view with horror the indescriminate slaughter of his brother, his sustenance, his Spirit of Life - the Buffalo. It is equally natural for the other to see only that the strip down the centre of the buffalo's tongue is useful to run certain machines in his new industries. After all, animals were put there for our use. Neither side could even begin to negotiate with the other bringing about bloodshed and loss for both. (p. 126)

To assume that all Natives have the same culture, for example, with similar opinions, attitudes, desires, life style, values and family orientations is erroneous. Researchers have however attempted to offer common attributes in Native culture.

One construct in culture - values - has been shown to be important to career decision making. Kluckhohn and Strodtbeck (1961), in their major work on variations in value orientations across cultures, believe there is a limited number of common human problems, to which all people at all times must find some solutions. These five problems stated in the form of questions are as follows:

(1) What is the character of innate human nature? (human nature orientation)

(2) What is the relation of man to nature (and supernature)? (man-nature orientation)

(3) What is the temporal focus of human life? (time orientation)

(4) What is the modality of human life? (activity orientation)

(5) What is the modality of man's relations to other man? (relational orientation)

One can hypothesize that the value orientations play a role in all facets of life, including decision making.

The authors interviewed and elicited numerous responses to specific questions relating to culture and value orientations of five distinct communities in the southwestern United States in the early 1950's. Two were American Indians; the Navajo - an off-reservation settlement

- and the Zuni - a Pueblo Indian community. The third group was a Spanish American village. A Mormon village and a recently established farming village of Texan and Oklahoman homesteaders comprised the last two groups. The authors attempted to predict, through prior research, the value orientations of each group. The results did determine significant differences from their predictions and between the five communities.

Human Nature Orientation

Regarding the innate goodness or badness of human nature, Kluckhohn and Strodtbeck (1961) believe there are three logical divisions: Evil, Good-and-Evil, and Good. In their study of the Navajo and Zuni Indians, they found this value orientation to show man as good-and-evil. There is an acceptance by these two Native groups of human vulnerability, mortality and the frailty of human nature in some human beings. Thus Natives believe they invariably have a good-and-evil side.

Man-Nature Orientation

The ranging variations in the man-nature orientation are:

(1) Subjugation to nature; people see themselves as helpless in the face of natural and supernatural forces.

(2) Harmony with nature; there is no real separation of man, nature and supernature with a wellness developing from this unity.

(3) Mastery over nature; the authors believe that this third orientation is characteristic of most Americans. Natural forces are to be overcome and put to use by people.

In their study, both the Navajo and Zuni showed a strong tendency to the harmony with nature orientation.

Time Orientation

Time problems must be dealt with by all societies. The possible cultural interpretations are Past, Present and Future. Past-oriented cultures tend to focus on the traditional way of life and those things accomplished historically. Present-oriented people stress the importance of the here and now. Future-oriented people stress the need for saving for a better tomorrow and a planned approach to life. Mainstream North America is generally future-oriented while the results of Kluckhohn and Strodtbeck's (1961) study show the Navajo and Zuni to be present-oriented.

Activity Orientation

The differences in the human activity orientation are based upon the distinction between being and doing. The doing orientation value, stresses the use of time engaged in activities with measurable outcomes. The being oriented person stresses behaviors which are expressions of an individual's existential yearnings. The dominant white North American culture generally has shown a preference for the doing orientation. This is the only value orientation

where the Navajo and Zuni correspond to the generalized American population.

Relational Orientation

The relational orientation, or man's relations to other people, has three subdivisions: the lineal, the collateral and the individualistic. A lineal orientation stresses that authority is highly valued and it is conceptualized as flowing in a vertical, hierarchial scheme. A dominant collateral orientation underscores interdependency. People relate to others following a horizontal network. Individualistic orientation leads people to relate to others according to the principle of their own interests in an autonomous fashion disregarding vertical and lateral frames. The authors determine that whereas most Americans are of the individualistic orientation, the Navajo and Zuni stress the collateral orientation.

Using Kluckhohn and Strodtbeck's theory, Hanson et al. (1982) identified several characteristically preferred values of Anglo and Native Americans. Table 3 lists the differences between Anglo American and traditional Indian American values.

TABLE 1

PREFERRED ANGLO AND INDIAN VALUES

ANGLO	ORIENTATION	INDIAN
mastery of nature avarice and greedy use of resources private domain	NATURE	harmony with nature beneficial reasonable use of resources land belongs to all
future oriented planning time awareness impatience saving emphasis on youth	TIME	present oriented impulsive time non-awareness patience giving emphasis and respect for age
competitive strong self importance aggressive guilt noise overstates, overconfident individualistic materialistic wealth theoretical	ACTIVITY	cooperative low self value submissive shame silence modest anonymity work for present needs equality pragmatic
individual emphasis immediate family representative government social coercian privacy and use of roominess in living	RELATIONSHIP	group, clan emphasis extended family/ clan face-to-face government permissiveness compact living in close contact and high indoor space utilization
skeptical logical converts others to religion religion - segment of life	SPIRITUAL	mystical intuitive respects others' religion religion - way of life

HANSON et al. (1982 p.9)

In more recent literature, Richardson in his excellent contribution to Sue's (1981) text "Counseling the Culturally Different" lists 37 different sets of Indian and Anglo values:

TABLE 2

DIFFERENCES IN INDIAN AND ANGLO VALUES

INDIANS	ANGLOS
1. Happiness-this is para-mount! Be able to laugh at misery; life is to be enjoyed.	1. Success-generally involving status, security, wealth and proficiency.
2. Sharing-everything belongs to others, just as Mother Earth belongs to all people.	2. Ownership-indicating preference to own an outhouse rather than share a mansion.
3. Tribe and extended family first, before self.	3. Think of "Number One!" syndrome.
4. Humble-causing Indians to be passive-aggressive, gentle head hangers, and very modest.	4. Competitive-believing "If you don't toot your own horn then who will?"
5. Honor your elders - they have wisdom.	5. The future lies with the youth.
6. Learning through legends; remembering the great stories of the past, that's where the knowledge comes from.	6. Learning is found in school; get all the schooling that you possibly can because it can't be taken away from you.
7. Look backward to traditional ways-the old ways are the best ways; they have been proved.	7. Look to the future to things new-"Tie Your Wagon to a Star and Keep Climbing Up and Up".

INDIANS	ANGLOS
8. Work for a purpose-once you have enough then quit and enjoy life, even if for just a day.	8. Work for a retirement-plan your future and stick to a job, even if you don't like it.
9. Be carefree-time is only relative. Work long hours if happy. Don't worry over time; "I'll get there eventually".	9. Be structured-be most aware of time. "Don't put off until tomorrow what you have to do today". Don't procrastinate.
10. Discrete - especially in dating. Be cautious with a low-key profile.	10. Flaunt an openness - "What you see is what you get". Be a "Fonz" character.
11. Religion is the universe.	11. Religion is individualistic.
12. Orient yourself to the land.	12. Orient yourself to a house, a job.
13. Be a good listener-and it is better if you use your ears and listen well.	13. Look people in the eye-don't be afraid to establish eye contact. It's more honest.
14. Be as free as the wind.	14. Don't be a "boat rocker".
15. Cherish your memory-remember the days of your youth.	15. Don't live in the past - look ahead. Live in the here-and-now.

	INDIANS	ANGLOS
16.	Live with your hands - manual activity is sacred. "Scratch an Indian - you'll find an artist." (Indians are also intelligent.)	Live with your mind - think intelligently. Show the teacher how well you know the answers to questions he/she might ask of you. Good at books.
17.	Don't criticize your people.	A critic is a good analyst.
18.	Don't show pain - be glad to make flesh sacrifices to the Spirits.	Don't be tortured - don't be some kind of a masochistic hut.
19.	Cherish your own language and speak it when possible.	You're in America; speak English.
20.	Live like the animals; the animals are your brothers and sisters.	"What are you - some kind of an animal? A Pig or a Jackass?"
21.	Children are the gift of the Great Spirit to be shared with others.	"I'll discipline my own children; don't you tell me how to raise mine!"
22.	Consider the relative nature of the crime, the personality of the individual, and the conditions. "The hoe wasn't any good anyway."	The law is the law! "To steal a penny is as bad as to steal 10,000! Stealing is stealing! We can't make exceptions."
23.	Leave things natural as they were meant to be.	"You should have seen it when God had it all alone!"
24.	Dance is the expression of religion.	Dance is the expression of pleasure.

	INDIANS		ANGLOS
25.	There are no boundaries - it all belongs to the Great Spirit. "Why should I fence in a yard?"	25.	Everything has a limit - there must be privacy. "Fence in your yard and keep them off the grass!"
26.	Few rules are best. The rules should be loosely written and flexible.	26.	Have a rule for every contingency. "Write your ideas in detail."
27.	Intuitiveness.	27.	Empiricism.
28.	Mystical	28.	Scientific.
29.	Be simple - eat things raw and natural. Remember your brother the Fox and and live wisely.	29.	Be sophisticated - eat gourmet well prepared, and seasoned. Be a connoisseur of many things.
30.	Judge things for yourself.	30.	Have instruments judge for you.
31.	Medicine should be natural herbs, a gift of Mother Earth.	31.	Synthetic medicines - "You can make anything in today's laboratories."
32.	The dirt of Mother Earth on a wound is not harmful but helpful (Sun Dance, mineral intake).	32.	Things must be sterile and clean, not dirty and unsanitary.
33.	Natives are used to small things, and they enjoy fine detail (Indian fires).	33.	Bigness has become a way of life with the white society (compulsion for bigness).
34.	Travel light, get along without.	34.	Have everything at your disposal.

	INDIANS		ANGLOS
35.	Accept others - even the drinking problem of another Indian.	35.	Persuade, convince and proselytize; be an evangelist/ missionary.
36.	The price is of no concern.	36.	"You only get what you pay for!"
37.	Enjoy simplifying problems.	37.	"Nothing in this world is simple!"

(Richardson, p. 225-227)

Bryde (1971), a noted Indian author who wrote "The Psychology of the Indian", developed a similar extensive list of basic value differences between Native and non-Natives. Trimble (1981, 1989) cites numerous studies regarding the value orientation of Native individuals. He states the following on the issue:

> Understanding American Indian clients can be enhanced if counselors realize the importance of life-style preferences and orientations. Strength of value preferences play important parts in shaping the way Indians perceive themselves and relate to others. As clients, therefore, Indians should be given ample opportunity to emerge and grow within the counseling context under their own terms and from their own conceptual frame of reference. (1981, p. 222)

Nyberg and Clarke (1988), in as yet unpublished research into what comprises Native culture, extensively review Native Canadian literature. The research has gleaned information from interviews, writings and questionnaires on the many factors that comprise Native culture. The goal of these researchers is to develop a measure of understanding and appreciation of Native ways. Their scale when developed

will attempt to measure understanding and appreciation of how Native people feel, how they act in certain circumstances and what they believe.

Nyberg and Clarke (1988) postulate that there are at least 9 unique Native cultural variables:

1. A special view of Nature and Man's relationship to Nature.
2. Kinship, respect for elders and individuality.
3. Communication patterns which are distinctive.
4. A concept of leadership which is unique.
5. Decision making, which represents a different approach.
6. Spirituality.
7. Generosity and cooperation.
8. Distinct views about time.
9. A unique way of expressing emotions.

(p. 31 and 32)

As previously discussed Rotter's (1966) construct of locus of control understood in terms of minorities and Native culture in particular may help in understanding decision making. To review, Rotter proposed the concept of locus of control which includes the concepts of internal or external control in making decisions. Internal control (IC) refer to people who believe that they can shape their own fate. External control (EC) refers to the belief that what transpires in life is a result of luck or chance.

To confirm Sue's (1981) conclusions that ethnic minorities, lower-class people and women score higher on the external end of the continuum, Tyler and Holsinger (1975) studied the concept in Native and white children.

Administering a locus of control scale to fourth, seventh, ninth and eleventh grade rural American Indian and rural white children, the authors predicted that Indians would have a greater tendency than whites to perceive that reinforcements are determined by factors external to themselves. They also predicted older children would be more internal than younger children and the Indian girls would be more internal than Indian boys. Support was obtained for all but the third hypothesis.

Sue (1981) suggests that if minorities fall more on the E-C dimension, then the attributes of apathy, laziness, procrastination, and feelings of "such is life" or "I can't do anything about it anyway" may persist. According to Sue, however, the locus of control dimension does not take into consideration the different social and cultural aspects. Gurin et al. (1969) and Trimble and Richardson (1982) have extensively studied the locus of control concept in Black and Native Americans respectively.

Gurin et al. (1969) introduced two unique aspects to locus of control studies. They determined and defined from their study a factor called "control ideology". Control ideology as they see it is a measure of general belief about the role of external forces in determining success and failure in a larger society. It represents a cultural belief in the Protestant ethic that success is a result of hard work, effort, skill and ability.

A second factor, "personal control" reflects a personal belief about his or her own personal efficacy or competence. While control ideology represents an ideological belief, the latter was more relevant to actual control.

Gurin et al.(1969) cite results that indicates blacks are equally internal to whites on the control ideology but when a personal reference (personal control) was used they were more external. Similar findings were obtained by Trimble and Richardson (1982) in their study of locus of control research among 720 American Indians.

What these studies show is that the blacks and Natives in the research may have adopted the general cultural beliefs about internal control but find that these cannot always be applied to their own life situations perhaps, as Sue (1981) believes, due to racism and discrimination. It is interesting to note that in the Gurin et al.(1969) study, the white sample endorsed control ideology statements at the same rate as personal control statements. The disparity between the two forms of control do not seem to operate in white America.

Sue (1981) summarizes the importance of his findings for understanding and counselling minorities:

> The I-E continuum is a useful one for counselors to use only if they make clear distinctions about the meaning of the external control dimension. High externality may be due to (a) chance-luck, (b) cultural dictates which are viewed as benevolent, and (c) a political force (racism or discrimination) that represents malevolent but realistic obstacles. In each case, it is a mistake to assume that the former is operative for

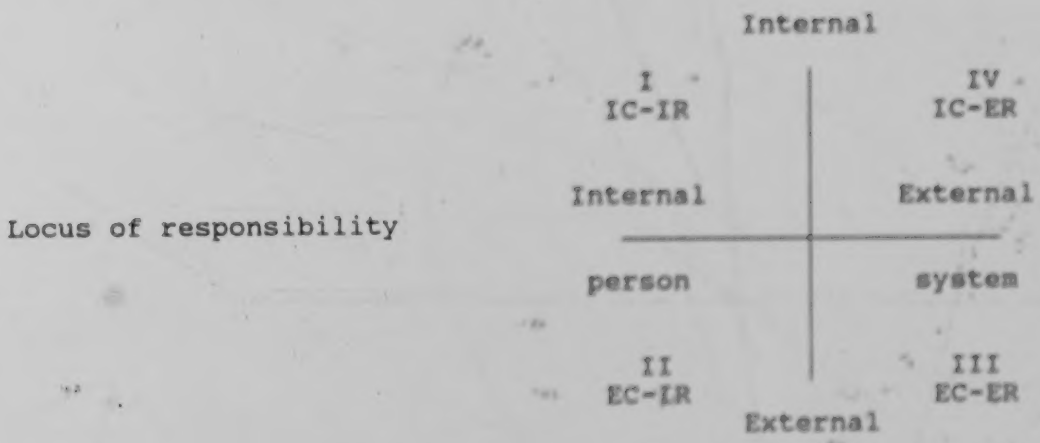
> a culturally different client. To do so would be to deny the potential influence of cultural values and the effects of prejudice and discrimination. The problem becomes even more complex when we realize that cultural and discriminatory forces may both be operative. That is, Native American cultural values that dictate an external orientation may be compounded by their historical experience of prejudice and discrimination in America. The same may be true for other ethnic groups as well. (p. 77)

Utilizing Rotter's Locus of Control, Sue added a second psychological orientation "locus of responsibility" to develop a new paradigm. In essence the responsibility dimension means the degree of responsibility or blame placed on the individual or system. Using this dimension, the lower standard of living for Natives may be attributed to their personal inadequacies and short-comings; or, as Sue believes, their plight is a result of racial discrimination and lack of opportunity. The former orientation blames the individual while the latter blames the system.

Figure 1 illustrates that even when the two psychological orientations are combined, they remain independent from one another and present four world views or orientations to life.

FIGURE 1

LOCUS OF CONTROL



Graphic Representation of World Views
Counseling the Culturally Different.
Sue (1981 p. 80)

According to Sue, each individual's internality and externality could be plotted in a particular quadrant - each quadrant representing a different world view. While he speculates that most white middle class people would fall into quadrant I, various racial and ethnic class people would not be randomly distributed throughout the four quadrants. Sue describes characteristics of each quadrant and speculates why various minority groups would be placed in them. His hypotheses are based on research and his conclusions provide numerous implications for counsellors attempting to understand and assist minority clients.

The differences between the Indian and dominant North American culture are further expanded upon by Bryde (1971) in his important contribution "The Psychology of the Indian". Bryde illustrates the difference in the Indian

value orientation and goes further to discuss differences in personality between white and Indian in Table 3.

TABLE 3

Personality Differences - Indian and Non-Indian

INDIAN	NON-INDIAN
1. Get along with the group; of conformity with the group	1. Get ahead or on top of group.
2. Get ahead for the group.	2. Get ahead for one's self.
3. Concentrates on and enjoys the now, or the present.	3. Concentrates on the future.
4. Decides for himself, following advice.	4. Others decide for him and force him.
5. Faces hard things (embarrasing incidents, etc.) without showing fear.	5. Faces hard things, but not always with an impassive face.
6. Uses nature, without losing his reverance for nature.	6. Uses nature for personal benefit.
7. Constantly aware of God, and acts of religion are spontaneous and at any time.	7. Awareness of God "underneath" and periodic. Religion is compartmentalized and acts of religion restricted to certain times e.g. Sunday.
8. Feels uneasy and fearful toward non-Indian world, but hides it with impassive face (Applies especially to young Indians).	8. Feels "at home" in non-Indian world.

(Bryde, 1971, pp. 96-7)

Bryde (1971) is one of the few Native authors who underscores and discusses the importance of the world of work. In fact, it is so important that it is the only area

where he says Natives should be like the dominant culture. The following quote illustrates his point:

> We have already seen in the earlier part of this chapter that when two cultures live side by side they borrow ideas from each other and use them in their own culture. When one culture surrounds another culture, as in the case of the non-Indian culture's surrounding the Indian culture, this same borrowing takes place. When the Indian culture comes in contact with the non-Indian culture, there is only one idea in which the Indian cannot borrow. The word borrow implies that we can take it or leave it. This one area where he must do the same thing as the non-Indian is in the way of making a living; that is, by working every day from eight to five. In every other area, the Indian can be as Indian as he likes in his own culture. If the non-Indian can face the hard situation of working every day from eight to five, it would be a sad thing if an Indian admitted that he could not do that hard thing also, especially since in his Indian culture his ancestors were used to doing much harder things than the non-Indians. This would be admitting that a non-Indian could do a hard thing better than an Indian could and no self-respecting Indian, if he knew his values, would ever admit this. (Bryde, p. 36)

As has been indicated previously, personality factors have been considered important in career development. The appropriateness, however, of applying existing personality theories to members of minority groups comes into question (Axelson, 1985; Sue, 1981). According to their studies, minority status may result in unique patterns of personality development. Axelson (1985) presents a schema entitled "The Minority Identity Development model (MID). The model defines five stages of development that oppressed people may experience as they struggle to understand themselves in terms of their own minority culture, the dominant culture

and the oppressive relationship between the two cultures. The schema is an attempt to assist helping professionals to understand minority attitudes and behavior within existing personality theories.

The five stages include (1) conformity (2) dissonance (3) resistance and immersion (4) introspection and (5) synergetic articulation and awareness. The highly complex schema provides examples of four corresponding attitudes that are an integral part of any minority person's identity; how he or she views: (a) self (b) others of the same minority (c) others of another minority and (d) majority individuals. The MID model and, Sue's paradigm regarding locus of control for minorities are two examples of attempts to help understand the personality development of minority group members.

Natives and Career Development

According to Crites (1969), there is limited empirical evidence on the correlates of career decision making. Herr and Cramer (1984) state "there are not quality books and articles on counseling the culturally different" (p. 156). Some research does exist that provides valuable input on how some of the many factors previously mentioned impact on Natives in general.

There does not exist extensive research on the career development of Native Canadians or Albertans specifically and North American Natives in general. The research that

does exist is often dated and narrow in scope emphasizing career educational approaches in bridging the gap from school to work (Lee and Thomas, 1983; Sabota, 1978). The Native Indian Child Abuse and Neglect Resource Centre, Lazarus (1982) and Matheson (1986) plead for an improved understanding of Indian culture as it pertains to human growth and development.

Race and gender does make a difference in the choice of careers and the nature of decision making theories. The following studies illustrate the impact of race and gender on career development and provide evidence that casts some doubt and confusion on the construct validity of career development theories as they pertain to minorities, including minority women.

As an illustration, researchers investigating the role of self-concept in the career development process have been supportive of Super's (1957) hypotheses (Gonyea, 1961; Healy, 1968). However, the important impact of such variables as race and gender upon the career maturation process have not been clearly established. Lawrence and Brown (1976) studying 12th graders, established that self-concept had a different impact on career maturity, depending on the race and gender of the participants. As a predictor variable, self-concept seemed to have a lesser effect on career maturity than the predictor variables of race and gender. They concluded that Super's self-concept theory had

more validity when referring to white males than when referring to females or blacks in general.

Pound (1978) studied the same construct in 1,000 New York high school students. Pound's conclusions were that Super's self-concept theory had more validity when referring to black males than when referring to females or whites, in general.

McNair and Brown (1983) in their study of 259 black and white high school students challenge Pound's conclusion by providing evidence that self-concept added significantly to the prediction of career maturity for whites only. Their results supported Lawrence and Brown's results that white students scored higher on career maturity measures than did black students. Females, however, scored significantly higher than the males, refuting Lawrence and Brown's gender findings.

Additional research presents conflicting findings on the role interests play in the career development of Native populations (Haviland and Hansen, 1987; Scott and Anadon, 1980). Two studies attempted to determine the validity of administering interest inventories to Native students. Gade, Fuqua and Hurlburt (1984) found six significant differences on the Holland Self-Directed Search (SDS) between an Indian high school sample and a non-Indian high school sample. They also obtained significant differences between two Native groupings within the total Native sample.

They concluded that the SDS may be an inappropriate instrument for use with Native high school students unless local norms are considered. Hurlbert, Schulz and Eide (1985) however, concluded the SDS to be a reliable vocational interest inventory when administered to a small sample (n=52) of Manitoba and Ontario Treaty Indian high school students.

Broker (1981) developed a handbook for vocational counsellors working with Indian students. He brings together aspects of culture, tradition and values to be considered in counselling the Indian student about the world of work. Characteristics Broker reviews as important to Natives include respect, generosity, courage, and wisdom.

Many Native studies have reflected on other aspects of career development such as aspirations, work values, educational achievement, motivation and the role of the family.

McDiarmid et al. (1982) surveyed 323 Inuit youth in the Yukon and compared their results with those of white high school students in Alaska regarding their educational and occupational aspirations. They concluded that ethnicity contributed to different occupational aspirations and educational expectations.

In an interesting study comparing the work values of 232 rural Eskimo students in the Yukon with a comparable group of urban Caucasian students, McDiarmid and Kleinfeld (1986) concluded that Eskimo adolescents resembled their

white counterparts more often than not. Contrary to stereotypical belief, rural Eskimo adolescents preferred conventional year round jobs to intermittent work. Significant differences did appear, however, in the intrinsic satisfactions from wage work. Intrinsic values of autonomy, leadership, responsibility and challenge were more evident in the urban white students.

On the importance of factors that lead to college achievement between white and Sioux students, Huffman et al. (1986) found that college achievement for whites is related to social factors such as high school grade point average and parental encouragement to attend school.. Retention of Native cultural traditions contributed to higher educational success for the Sioux students. The author concludes:

> ...research in the area of higher education of Native Americans is greatly needed. Past studies have largely ignored the perceptions of Native American students regarding their college experiences. Like this research, most studies have tended to focus upon empirical measures of higher educational success and failure and the factors related to those outcomes. It appears that investigation into the subjective perceptions of Native American students themselves may shed much necessary light on this subject. (p. 37)

Like Huffman et al. Tippiconnic (1988) showed there exists a tremendous need to do more research at the elementary and secondary school levels as well. During the 1987-88 academic year, a sample of American Indian educators was asked a series of questions designed to obtain general attitudes towards the education of American Indians.

Ninety-three percent of the educators indicated a need for more research into the education of American Indians.

As a whole, American Indians have achieved the lowest educational levels among all racial minorities (Lin et al. 1988). While research stresses individual based factors such as poor high school preparation, financial problems and poor study habits, Lin et al., in studying 616 Indian students, found that the students believed that the college was itself a hostile environment, which resulted in lower achievement stemming from feelings of isolation.

In an earlier study, Dr. Lin concluded that there existed a gap for Native American students between ideal and reality with regard to the importance of education:

> As much as they are able to see the necessity of education for their future (a perception with regard to ideal), Native American students seem to have difficulty in relating courses taught in school to their real lives and futures (a perception with regard to reality). Though Native American youth seem to have a very pessimistic, disillusioned view of the world, their pessimism and disillusion are likely to reflect more of their experiential assessment of the world rather than of their own self. The feelings of despair and alienation are part of the consequences people often experience under the impact of social change, particularly after having experienced discrimination and oppression. (1985 p. 14)

The condemnation that the education provided Natives has destroyed Native culture and has resulted in their acculturation and assimilation is very prevalent. Dawson (1988) in discussing Native education and self-esteem believes the systematic destruction of Native culture and identity through the educational system has had a lengthy history in Canada. She indicates however, that although the

educational system has done so much to violate self-esteem; it may be the way in which some of the economic, psychological and social difficulties facing Native people may be addressed.

The Committee on Tolerance and Understanding was established in June of 1983 as a key component of the Government of Alberta's plan of action to encourage greater tolerance and respect for others. The plan of action was initiated out of the Government's deep concern that a certified teacher in a public school had been permitted to transmit over an extended period of time, views that were clearly racially and religiously prejudiced. Four discussion papers on the subjects, "Private Education", "Native Education", "Public Education", Intercultural Education" and a final report were released in May, June, September, October, and December, 1984 respectively.

The following condemnation of Native Education was presented in the final report.

> The general state of Native Education in Alberta is deplorable. The failure to respond to the special needs of Native students has been a shameful act of intolerance and misunderstanding. One need only examine the tragic circumstances involving Native youth, which point to unacceptable dropout rates, the dearth of Native students graduating from colleges and universities, suicides, a disproportionate number of Native youth in correctional institutions, age/grade retardation and unacceptable levels of poverty and alcoholism, to conclude that our Native youth are being treated as second class citizens by our educational system (Alberta, 1984, p. 116).

Many conclusions were drawn and recommendations provided to assist governments, school jurisdictions, educators and parents in alternative approaches to Native education in Alberta. Workable alternatives have been provided that range from how to improve Native cultural awareness in schools; how to increase involvement of the Native community including parents in educational planning, decision making and implementation and; how to implement unique and alternative forms of Native education (Alberta, 1984).

The battle for change continues and the direction for alternative courses of action continue to be posited. Couture (1988), a Native educator and psychologist, writes about what he considers are fundamental principles in Native education. Referring to basic cultural differences between Natives and Euro-Canadian culture, he elicits descriptions of both cultures similar to those of Bryde (1971) and Richardson (1983).

Couture (1988) depicts today's Native population as ranging on a continuum of highly acculturated urban Natives to traditional outback Natives. Couture believes that the education of Natives warrants enhanced Native cultural awareness and understanding including the implications of the traditional extended family, child rearing practices, the role and advice of elders and the distinctive personalities of traditional Native people. He writes of the importance of educators to understand the unique value

system of Native people and encourages a "holistic" approach to pedagogy. He emphasizes the need to not fractionalize life's experiences like those in the Euro-Canadian culture but to look at life's meanings in a Gestaltic approach. Experiential learning or learning by doing should also be encouraged in Native education.

According to Couture (1988);

> The purpose of Native education is not to provide an inferior education but to provide a <u>different</u> education, the objective of which is to develop knowledge, skills and values rooted in a centuries-old tradition in order that students can contribute to the betterment of their community and their people (p. 188).

It is interesting and encouraging to note that the Native Education Project of the Alberta Government is now writing an indepth career educational program for Native students and that a recent Native education policy has been implemented by the Alberta Government.

The family, another factor important in career development, has been shown to be very important and significant to Native development. Lee (1984), in attempting to prediot the career choice attitudes of rural Black, White and Native American high school students, concluded that two variables (parental influence and self-concept) vary from culture to culture.

Sundahl-Hansen (1985) offers opinion that suggests career guidance across cultures must take into consideration the implications of recent changes in the trend toward concern for human rights and individual development; changes

in the work structure and composition of the work force; changes in educational goals and programs and changes in family structures. These powerful forces have led her to present five new goals in career guidance across cultures.

(1) From slotting people into what is, to preparing them for life choices and options of what might be.

(2) From an emphasis primarily on occupational information and choice to an awareness of an individual's own "career socialization".

(3) From a focus on narrow stereotypic choices to expanding the range of options men and women are able and willing to consider and choose.

(4) From a focus strictly on jobs to a systems perspective on new work and family patterns and linkages.

(5) From a focus on work alone to emphasis on the relationship of the work role to other life roles.

Rindone (1988) studied 400 Navajos who had attained at least a four-year college degree. In studying their backgrounds, she found that in spite of low income and low educational level of the parents, the parents were able to motivate and encourage the students to succeed. The author contends that achievement motivation and aspirations toward high academic achievement have been prevalent among Native Americans and other minority groups, but only recently have these groups been afforded the opportunity to express these motives through education. Her study concluded that the family, as reassured through the stability of traditional

values, was the key to the academic success of the high achieving Navajos.

In a study of the transmission of cultural traditions and heritage of Natives in an urban center (Calgary, 1984), the majority of Native respondents believed it was important to have their children taught traditional skills and culture. There was, however, some variation in this desire based on status and education. Status Indians more so than non-Status Indians reflected more attachment to their culture.

Natives And Counselling

The role of the counsellor in career development is well documented (Herr and Cramer, 1984; Hoyt, 1975; Osipow, 1983). The role as counsellor has been shown to be important to those making career decisions. Whitfield (1988), in a recent review of the literature on the issue, argues that although some strides have been made in the past quarter century, students still need more help from counsellors:

> School counsellors must become an integral part of the program to assist students to acquire and use competencies that will ensure their successful adjustment and development in the occupational world. Career guidance programs must be expanded and maintained to meet the continuing needs of students and counsellors must revive or review the competencies and the skills necessary to serve students during their transition to the world of work. (p. 19)

Whitfield then provides a number of counsellor qualifications and competencies required in the specialized

area of career development including those for special populations.

In counselling Natives, there exists difficulties that must be reviewed and researched. Ludwig (1983) reviewed unique career educational programs for the Native population in most Canadian provinces. Repeatedly, the author underlines the need to understand the uniqueness of Native culture in attempting to assist this population in preparing for the work world. Emphasizing feedback from Native organizations and professionals, Ludwig believes more emphasis should be placed on special career curricula as well as resources and argues that counsellors must strive to accommodate the unique ways of Native thinking.

This belief is similar to that of such Native authors as Benham (1969), who stated the following about education in general:

> It is suggested that an attitude of understanding of the Indian people, based on a recognition of the problems and cultural differences and combined with a utilization of the process by which meaningful change occurs, should become the "tiers" in the foundation upon which all educational programs rest. We believe that if this foundation is firmly laid, a major problem of Indian cross-cultural education will have been solved, the manifold minor problems which stem from misunderstanding averted, and greater progress possible for Indian Americans. (p. 31)

Unfortunately, in the almost 20 years since Benham wrote his article, there are still problems in Native

education and problems between counsellors and Native clients.

Ryan (1969) believes the American Indian to be in a state of disequilibrium, torn between tribal culture and the culture of North American society. He defines the American Indian as "marginal man" in that he does not participate fully in either culture. Citing numerous examples of how this minority group is subjected to poverty, as evidenced by inadequate housing, underemployment and lack of education, he pleads for understanding of the Native cultural milieu by counsellors.

Super (1957) considers self-concept an integral part of career decision making theory. According to Super's theory, the self influences career choice because career decision making is a particular time of life where a person is called upon to voice clearly who they are and what kind of person they are. An individual will select a career direction which will be compatible with their self-concept and which will permit the individual to make the choice a reality by permitting them to play the role they wish to play.

This belief of Super should require career counsellors to seriously consider the self-concept of Native clients. Luftig (1983) concluded from his study of the effects of schooling on the self-concept of Native American students:

> ...it is becoming increasingly apparent that culture conflicts in expectations, attitudes and behavior between American Indian students, Anglo teachers and the dominant society's educational norms can adversely affect the self-concepts of

> American Indian students. If schooling is to have a facilitative effect on Native American self-concept, more effort must be placed on creating a bi-cultural interface between teacher, student and school. (p. 258)

The need to create this interface between student, school, home and counsellor is required as well.

Krebs, Hurlburt and Schwartz (1988) using Holland's Self-Directed Search (SDS), obtained significant differences in vocational self-estimates and competences between a sample of Manitoba Native and non-Native high school students. In total, there were significant differences in 10 of the 12 SDS self-estimates.

Seven significant differences on the self-estimate scales were obtained between the Native and non-Native females. There were also six significant differences between Native males and females.

In analysing perceived competencies of Holland's six SDS occupational codes, significant differences were found in comparing male scores, with Native males scoring lower on four of the six scales; realistic, investigative, social and enterprising and equally on artistic and conventional codes. Native females scored higher on the realistic competency than non-Native females but significantly lower on artistic, social and enterprising. Differences were focused as well between Native male and Native females scores - Native males scored higher on realistic and investigative codes while Native females scored higher on the social and conventional codes. The summary of these results indicate that Native

male and female high school students recorded lower self-estimates and perceived competencies than the scores of the non-Native norms for the SDS. Krebs et al. (1988) believe the results may reflect a lower self-image for Natives as well as a lack of vocational confidence.

If as Super (1957) suggests choosing a career involves the individual implementing a particular self-concept then;

> ...Native career counselling should be an activity which recognizes, supports and stimulates the self-formation of the individual.
> (Krebs et al. 1988, p. 221)

They conclude their worthwhile study by providing specific Native career counselling strategies considered useful with high school populations. The strategies discussed focus on (1) increasing the counsellor's cultural sensitivity, (2) enhancing Native students' self-concepts with such strategies as examining personal life skills, strengths as well as competencies and their relevance to the world of work, experimenting with occupational fantasies and role plays, focusing on positive self-appraisal, teaching decision making and problem solving skills and enacting value clarification approaches, (3) decreasing stereotypes and gender differences, (4) emphasizing the use of Native role models, and (5) incorporating more direct work experience into the lives of Native students.

An exhaustive study on Native education, training and employment (ALTA, 1987) provides almost 40 recommendations from Native individuals, Native organizations and private

industry on new thrusts required to change the high levels of unemployment and under employment for Native Albertans. Numerous recommendations relate to the need for more counselling and counsellors; different approaches to counselling as well as enhanced career education programs. The Committee on Tolerance and Understanding (ALTA, 1984) also alluded to the need to improve and expand Native counselling services.

Darou (1987), in reviewing the literature and research in counselling Native Canadians, believes that counselling and psychotherapy appear to be problematic issues for Canadian Native people. The view was substantiated by Sue and Sue (1977) who found that 50% of Natives dropped out of counselling after their first session - compared to 30% for Anglos.

The counselling literature during the last decade provides some valuable insights into why Natives may be negative to counselling. Trimble (1981) suggests that counsellors may misunderstand their Native clients behavior due to "inter-ethnic" conflicts. In addition, Trimble believes that counsellors must focus on the culture of the Native client.

That counsellors should understand the culture of the Native client or be "culturally skilled" as Murphy and Deblassie (1984) define it, is an understatement as evidenced by the literature. Richardson (1981), Sue (1981), Atkinson (1983), Axelson (1985), Matheson (1986) and Darou

(1987) list many problem areas in counselling the Native client. Lack of cultural understanding, language, questions in counselling, silence in counselling, eye contact in counselling, and the impact of racism, discrimination and prejudice on Native psychological development are only a few of the issues that must be considered in the successful understanding and treatment of Native clients.

Sue (1981), Richardson (1981), Dillard (1983) and Axelson (1985) are among recent proponents of different approaches to counselling minorities and Natives in particular. All three emphasise the multitude of cultural variables that impinge on the Native person which may result in misunderstanding and misapprehension.

Three unique approaches, previously documented in this chapter, provide new insight for those counselling Natives: Richardson's (1981) cultural and historical perspectives in counselling American Indians, Sue's (1981) world views approach to counselling the culturally different and Atkinson's (1983), Minority Identity Development Model.

Matheson (1986) also provides a thorough examination of issues and suggestions for counselling professionals assisting Native clients. He suggests non-Native service providers focus on three areas if positive growth enhancing relationships are to be established. The first is an inner self-assessment or self-adjustment by the counsellor. The second focus is on becoming knowledgeable about the client. The third focus combining focus one and two, is the process

of providing ethnically sensitive psychotherapy and other human services.

Matheson emphasizes the major impact of "respect" in the treatment of Native clients. The term "respect" reflects a deeply inner process a quality one carries constantly. Respect in Matheson's terms is not a reactive phenomenon, only stimulated in response to specifically measured behaviors or status, nor is it to be earned or withdrawn at the whim of a personal affront.

> Respect in this context refers to a sense that in order for a person to participate in creation, it is essential that the person achieve and nourish a personal and satisfying relationship within self and with all other living forms... It is a conscious and active awareness of the ever-changing, fluxing and waning dance between an individual and his/her universe.
>
> (1986, p. 116)

Matheson (1986) encourages counsellors to base each judgement about a Native person or group on the host value system. He asks counsellors to focus on the specific Native values; of the importance of extended family; personal determination defined in the context of a tribal society of interdependent people who attempt to live cooperatively with others and their environment; and harmony, which transcends all other values.

In his discussion of Native patterns of belief, Matheson (1986) points out that all Indian culture is a spirit-oriented culture.

> Nearly every spiritual expression among Indian people,... is performed against a backdrop picturing the spirit world as the real world. One

> daily encounters a shadow world. This is the world which only mirrors that which is real, that is, that which is spiritual... In a culture which lives this close to the spirit world, it is not considered pathological to "see" or "hear" spirits in our everyday life.
>
> (1986, p. 123)

He provides cautions that prolonged eye contact is considered disrespectful and that it is wrong to embarrass or to make another feel uncomfortable in any way. Personal questions occurring in intake counselling interviews offend in this way, especially when questions refer to the family.

Schilling (1986) developed a guide for cross-cultural counselling. She also emphasizes the need to understand Native cultural values and offers cautions and direction to counsellors. In the areas of non-verbal communication, she provides improved understanding in the use and significance of silence, distance, eye contact and body language. She also alludes to verbal communication skills in counselling, touching on issues of formality, rapport and how to overcome language barriers.

Empirical research provides data showing how Natives view counsellors and counselling.

LaFramboise, Dauphinais and Rowe (1980) designed the Counselling Helping Questionnaire; an instrument that measures student's perceptions towards counsellors, attitudes toward helping persons and the helping process itself. Administering this instrument to 150 Indian and non-Indian grade 11 and grade 12 students yielded results

that showed the overriding importance of trust in a potential helping person.

Laframboise and Dixon (1981) performed a counselling analogue study designed to evaluate the effects of counsellor trustworthiness and counsellor ethnicity on American Indian student ratings of perceived counsellor trustworthiness. Trustworthy counsellors were seen as significantly better helpers. Ethnicity was not important for low trustworthy counsellors but for high trustworthiness, the Native counsellor was seen as more effective than the non-Native. The results also illuminated the importance of culturally appropriate communication in counselling.

Further research by Haviland, et al. (1983) tested the preference of Native American college students for counsellor race and found that this population preferred Native American counsellors regardless of the problem situation. Dauphinais, Dauphinais and Rowe (1981) asked 102 American Indian grade 11 and 12 students to rate seven dimensions of perceived counsellor credibility and utility. Results showed that Indian counsellors were perceived as more effective than non-Indian counsellors. It is also noteworthy that the Indian students rated the non-directive "facilitative" verbal response style of counselling less effective than either a directive or a cultural/experiential style. This is a most interesting finding, considering the

emphasis of many counsellor training institutions on the Rogerian approach to counselling.

The review of the literature exemplifies the need for counsellors to rethink traditional modes of counselling and identify the most appropriate methodology to assist their Native clients in need. The holistic approach to counselling seems to be emphasised by many studying Native culture and counselling Native clients (Couture, 1987; Darou, 1987; Matheson, 1986).

Matheson explains the need for holistic counselling by discussing how difficult it is to explain to a Native client that although he has emotional dysfunction, he has other positive, even admirable qualities.

> The therapist needed to understand how difficult it might be for an Indian to be mechanical about his existence. How difficult to see himself as a car engine in which the carburetor needs adjustment so you take it out away from the rest of the car, fix it and put it back. The (Native) clients tend to see themselves and their dysfunction only in relation to their other parts and the environment in which they live.
> (1986, p. 127)

The holistic Gestaltic approach to counselling Native students is encouraged by Campbell (1987). In addition, Couture's (1987) emphasis of holistic approaches to the philosophy and psychology of education rooted in traditional Native values has implications for those involved in the personal growth, development and adjustment of Native people. Thornbrugh and Fox (1988) are also Native educators with extensive experience in counselling Native teens. They

offer the opinion that a holistic approach to counselling Native youth has been successful. They have designed preventative group counselling programs that focus on all emotional, social, mental and physical factors which contribute to growth and development of the whole person.

Darou (1987) summarizes well the many issues and thoughts pervading much of the literature on counselling Natives. He believes that counselling or psychotherapy with Natives including issues of career choice, could be enhanced by the recognition of several factors:

- With a certain level of ability, a Native therapist or an elder is probably more effective than a non-Native.
- Lacking a suitable Native, the non-Native's knowledge of true versus idealized Native culture will increase the likelihood of success.
- Native silence, often perceived as a problem by non-Natives, needs to be reinterpreted as communicating high stress or respect.
- Native people tend to put aside anger....
- A demand for self-disclosure as it is conceived in counselling is resented, yet the non-Native counsellor often misses even clear non-verbal disclosures.
- It is generally seen as intrusive and inappropriate to ask questions.

(Darou, 1987, p. 39)

> In conclusion, the counselling situation is in a poor condition in terms of how it serves Native clients. Much of this is due to transferring counselling services unadapted to a new context, and to the unintentional ethnocentrism of the service providers. Perhaps because of Native people, the situation is not beyond hope, and can be rectified by an openness to learning and flexibility on the part of counsellors.
>
> (1987, pp. 39-40)

With these considerations and improved understanding of Native culture, perhaps Murphy and Deblasie's perception of counselling will come to fruition:

> The counsellor must be concerned with the linkage of both realities of the Native American within themselves as well as within their clients. Involvement of the community in the schools can enhance this linkage. The global attitude can enable counsellors to come closer around the fire and the centre of Indian reality. They can then come closer to help Native Americans choose their responsibility in life because the past and the present will strike a balance for which the Indian strives.
>
> (1984, p. 30)

In summary, the review of the related literature attempted to provide information regarding the vast domain of career development with a specific emphasis on the myriad of factors influencing career decision making. The literature presented regarding Native people attempted to enhance the understanding of this unique cultural group. As few references are available pertaining to Native career development and counselling, it is evident that more research is required. Specific literature pertaining to Native people and factors they believe influence career decision making are few and primarily refer to the issues in an American context.

Hypotheses

The following six testable hypotheses were formulated to determine if Native and non-Native Edmonton high school

students differed on their opinions regarding cultural values and factors influencing their career decision making.

This research is exploratory in nature, therefore the 6 hypotheses to be tested are drafted in the null form.

Hypothesis I

There are no significant differences between Edmonton Native high school students and Edmonton non-Native high school students on their rating of 37 pairs of cultural value statements as measured by opinions expressed on the Cultural Value Inventory (CVI).

Hypothesis II

There are no significant differences between Edmonton Native high school students and Edmonton non-Native high school students on the rating of each of the six major factors affecting career decision making as measured by the Career Factor Checklist (CFC).

Hypothesis III

There are no significant differences between Native Edmonton male high school students and non-Native Edmonton male high school students on the rating of the six major factors affecting career decision making as measured by the CFC.

Hypothesis IV

There are no significant differences between Edmonton female Native high school students and Edmonton female non-Native high school students on the rating of the six major

factors affecting career decision making as measured by the CFC.

Hypothesis V

There are no significant differences between Native students who have lived on a reserve, Metis colony/ settlement or both, and those Native students who have not had this residency experience on the rating of the six major factors affecting career decision making as measured by the CFC.

Hypothesis VI

There are no significant differences between Indian Edmonton high school students and Metis Edmonton high school students on the rating of six major factors affecting career decision making as measured by the CFC.

CHAPTER III

METHODOLOGY

The Sample

The subjects in this research were comprised of 137 Native and 148 non-Native high school students enrolled in schools with the Edmonton Separate (Catholic) School Board (ESSB) and the Edmonton Public School Board (EPSB). All subjects (N=285), were registered in grade 10, 11 or 12 programs during the 1989-1990 school term.

Native Sample

The ESSB identifies students of Native origin through voluntary self-disclosure questions on registration forms completed each year by the students or their parents or guardians. The ESSB Native high school students participating in the research included: all of the high school students identified through registration forms as having Native status; attending school at the time of gathering of information; willing to participate in this study and who were not involved in the pilot research (N=103). The Native students attended 7 of the 8 ESSB high schools.

Thirty-four Native high school students attending classes with the Edmonton Public School Board participated in this research. The EPSB does not identify students of

Native origin nor does it formally request voluntary self-disclosure of Native status from its students. Consultation with the administration and Native counselling personnel within the EPSB elicited information that three schools could easily generate a total of 150 Native students. It was only through lengthy consultation, communication and the generosity and time of the administration, teaching staff and counsellors at these three EPSB schools that the 34 Native students were identified and ultimately participated in this research.

Non-Native Sample

Non-Native students were randomly sampled from the same high schools attended by the Native subjects participating in this study. The non-Native sample was randomly selected in near equal numbers to the Native sample, from the total population of non-Native students attending each school participating in the study. The total non-Native sample of 148 subjects included 33 students from the EPSB and 115 students enrolled in ESSB classes.

Characteristics of the Sample

A total of 285 grade 10, 11 and 12 high school students attending classes during the 1989/90 school term, in the Edmonton Separate and Public school systems participated in this study. There were a total of 137 Native students and 148 non-Native students. Forty-four percent of the total

sample was male and 56% female. Forty-one percent of the Native sample was male and 59% female, while 47% of the non-Native students were male compared to 53% female. Ninety-eight percent of the total sample lived in Edmonton.

Table 4 lists the demographic profile of the two sample groupings from data obtained from the background information questionnaire.

Table 4

Demographic Data Comparisons of Native and Non-Native Samples Participating in the Study

Category	Native	Non-Native
Number of Students	137	148
Grade 10	64	32
Grade 11	33	45
Grade 12	40	71
Male	56	69
Female	81	79
Age 14	2	1
Age 15	33	20
Age 16	33	40
Age 17	36	48
Age 18	19	25
Age 19	11	11
Age 20	1	2
Age 21	2	1
Living in Edmonton	133	142
Not Living in Edmonton	4	2
Missing Data	-	4
Length of Residency in Edmonton		
0 - 1 year	26	11
2 - 5 years	31	15
6 - 10 years	11	21
over 10 years	69	99
missing data	-	2

Demographic Data Comparisons of Native and Non-Native Samplse Participating in the Study (continued)

Category	Native	Non-Native
Program Registered in High School		
Academic/Adv. Diploma	23	55
General Diploma	88	74
Vocational/Technical	13	16
Other	13	3
Native Status		
Metis	70	
Treaty/Status	65	
Inuit	2	
Lived on Reserve	53	
Lived on Metis Settlement/Colony	18	
Occupational Prestige Scores		
1. Professional	-	16
2. Proprietors, Managers and Office, Large	-	8
3. Semi-Professional	9	10
4. Proprietors, Managers and Office, Small	24	22
5. Skilled	25	31
6. Clerical and Sales	13	16
7. Semi-Skilled	31	29
8. Unskilled	30	15

'T' test results comparing age of respondents yielded no significant differences (p=.180). The mean age for the Native sample (16.6) was slightly lower than the non-Native students (16.8).

Chi-square analysis for group, sex and Edmonton residency yielded no significant differences between the samples, thus indicating that the samples were comparable.

However, significant differences were obtained between the Native and non-Native sample for grade, length of residency in Edmonton, program registered in at high school and socioeconomic status.

Significant Chi-square results for grade placement (Table 5) may be attributed to the disproportionate percentage of Native students in grade 10 (46.7) compared to grade 10 non-Native students (21.6). In addition, there was a greater percentage of non-Native students in grade 12 (48.0) compared to the Native respondents (29.2). Due to the ongoing difficulties in identifying and in determining which Native students would ultimately participate in this study, it was determined to sample randomly the non-Native students in numbers equal to those Native students anticipated from each school without primary consideration for age, sex or grade.

Table 5

Grade Level of Native and Non-Native Students

Group Membership	Grade 10	Grade 11	Grade 12	Total
Native	64 46.7%	33 24.1%	40 29.2%	137 100%
Non-Native	32 21.6%	45 30.4%	71 48.0%	148 100%

Chi-square $(2, N = 285) = 20.77687$, $p = .00004$

Significant differences were obtained between the Native and non-Native samples on their length of residency in Edmonton (Table 6). Over 82% of the non-Native students indicated residency in Edmonton over six years compared to only 58.4% for their Native peers. Only 7.5% of the non-Native students lived in Edmonton less than 1 year compared to 19% of the Native students.

Table 6

Length of Residency in Edmonton for Native and Non-Native Students

Group Membership	0-1 Year	2-5 Years	6-10 Years	Over 10 Years	Total	Missing Data
Native	26 19.0%	31 22.6%	11 8.0%	69 50.4%	137 100%	
Non-Native	11 7.6%	15 10.3%	21 14.4%	99 67.8%	146 100%	2

Chi-square $(3, N = 283) = 19.86233$, $p = .0002$

Table 7 indicates the results of Chi-square analysis of data obtained from the students on the programs they were registered in high school. Numbers of non-Native students registered in the academic/advanced diploma program (37.2) more than doubled their Native peers (16.8). Almost 65% of the Native students were registered in the general diploma programs compared to 50% for non-Natives. Thirteen students were registered in "other" programs compared to only three non-Native students. Most of the Native students were

registered in a special education program (integrated occupational program) or the Ote Nagan Native program offered at one of the high schools.

Table 7

High School Program Registration for Native and Non-Native Students

Group Membership	Academic Advanced	General	Vocational Technical	Other	Total
Native	23	88	13	13	137
	16.8%	64.2%	9.5%	9.5%	100%
Non-Native	55	74	16	3	148
	37.2%	50.0%	10.8%	2.0%	100%

Chi-square (3, N = 28) = 20.50442, p = .0001

Socioeconomic status was determined through the use of the Pineo and Porter Occupational Prestige Scale (1967). Table 8 provides data illustrating why significant findings on the Chi-Square were evident. No Native students were ranked in the top two classifications of the scale compared to 16.3% of the non-Native group. Approximately 46% of the Native students were classified in the unskilled and semi-skilled rankings compared to 29.9% of the non-Native sample.

Seventy of the 137 Native students listed Metis status. Sixty-five indicated they were Treaty or Status Indians and only two were Inuit. Seventy-one of the total Native sample have lived on a reserve or a Metis colony/settlement.

Table 8

Socioeconomic Status of Native and Non-Native Students

Group Membership	Level* 1	Level 2	Level 3	Level 4	Level 5 6	Level 7	Level 8	Level	Total Data	Missing
Native	-	-	9	24	25	13	31	30	132	5
	0%	5.0%	6.8%	18.2%	18.9%	9.8%	23.5%	22.7%	100%	
Non-Native	16	8	10	22	31	16	29	15	147	1
	10.9%	5.4%	6.8%	15.0%	21.1%	10.9%	19.7%	10.2%	100%	
Chi-square	(7,N - 279) - 29.43810, p - .0001									

Note:* Level 1 - Professional
Level 2 - Prop.,Managers & Officials, Large
Level 3 - Semi-Professional
Level 4 - Prop., Managers & Officials, Small
Level 5 - Skilled
Level 6 - Clerical & Sales
Level 7 - Semi-Skilled
Level 8 - Unskilled

Research Instruments

Four instruments were employed in the research. They include a background information questionnaire, the Cultural Value Inventory (CVI), the Career Factor Checklist (CFC), and the Pineo & Porter Occupational Prestige Scale.

Instrument A

Background Information Questionnaire

All subjects were asked to complete the background information questionnaire (Appendix C). The data gathered from this instrument assisted in developing a profile of the subjects responding from the Native and non-Native samples as well as determining whether differences in opinion on the CFC could be attributed to some or all of these background variables.

All subjects were requested to provide information regarding: grade, sex, age, residence and length of residence in Edmonton, location of residence if not in Edmonton, program registered in high school and mother's and father's occupation.

In total, the Native and non-Native questionnaire packages were identical except for three additional questions posed to the Native subjects involving Native status, residency experience on a reserve and residency experience on a Metis settlement or colony.

Instrument B

Modified Career Factor Checklist

The Career Factor Checklist (CFC), Appendix B, is an opinionnaire developed by O'Neil, Meeker and Borgers (1978). The instrument is based on their model depicting 6 general factors and 22 subfactors affecting the sex role socialization and career decision making process shown in Figure 2. Respondents are asked to indicate on a five-point Likert scale from "strong effect" to "unsure of effect", the degree to which various factors affect their career decision making.

The O'Neil, Meeker and Borgers model (Figure 2) is based on a number of theories including those pertaining to career development (Bordin, Nachmann and Segal, 1963; Holland, 1973; Roe, 1957 and Super, 1957) correlates of career choice (Crites, 1969), social system approach to career development (Osipow, 1973), social learning theory of career selection (Krumboltz, 1978) and specific aspects of men's and women's career development (Crites, 1969; Zytowski, 1969).

O'Neil, Meeker and Borgers hypothesized that six general factors affect both sex role socialization and the career choice process. The six general factors are:

(1) Familial
(2) Societal
(3) Individual
(4) Socioeconomic
(5) Situational
(6) Psychosocial-emotional

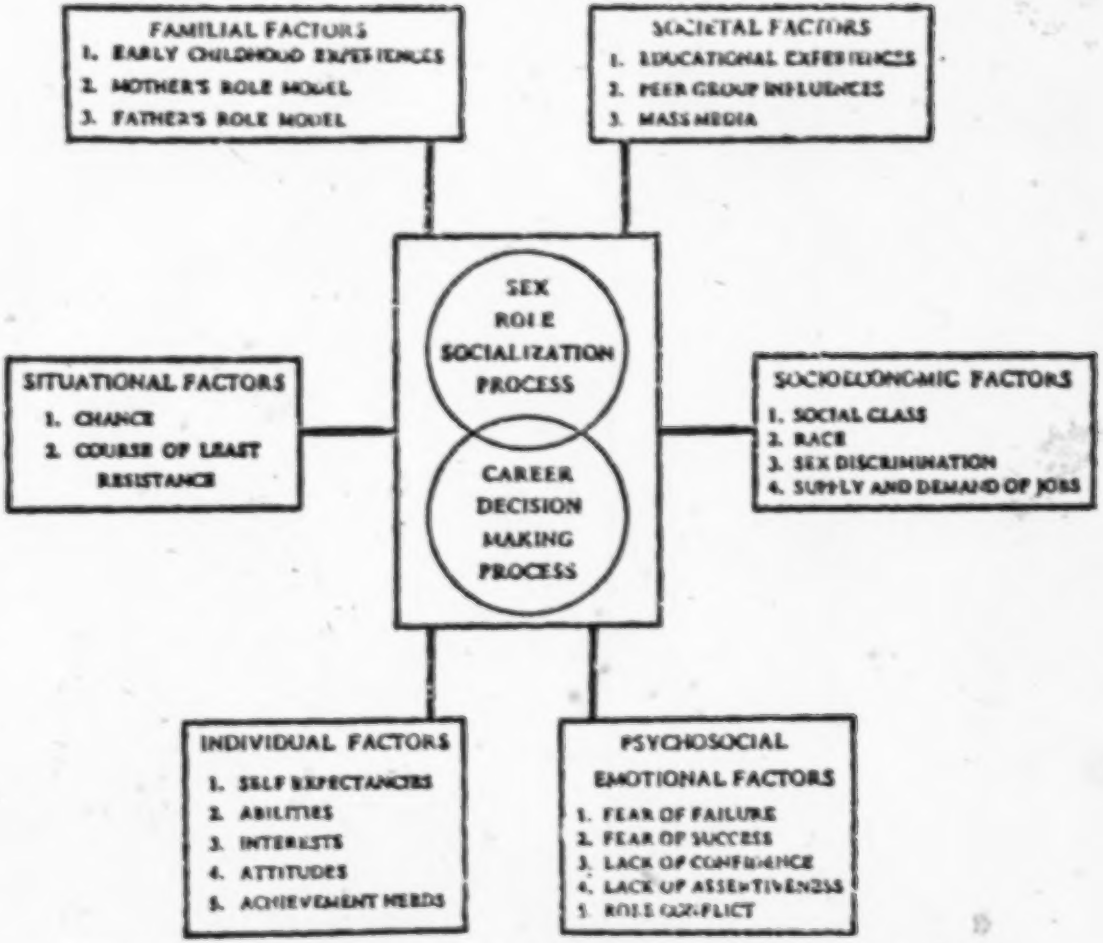


Figure 2: Factors Affecting the Sex Role Socialization and Career Decision Making Process (O'Neil, Meeker & Borgers, 1978; O'Neil & Bush, 1978; O'Neil, Ohlde, Barke, Prosser Calwick & Garfield, in press)

Table 9 lists the 6 general factors and the 22 subfactors as they are numbered and arranged on the CFC.

Table 9

Six General Factors and Twenty-two Subfactors Comprising the Career Factor Checklist

(1) Familial Factors

- (2) Childhood Experiences
- (3) Mother's Role Model
- (4) Father's Role Model

(5) Societal Factors

- (6) Educational Factor
- (7) Peer Group Influences
- (8) Mass Media

(9) Individual Factors

- (10) Self Expectations
- (11) Abilities
- (12) Interests
- (13) Need to Achieve
- (14) Attitudes

(15) Socioeconomic Factors

- (16) Social Class
- (17) Race
- (18) Sex Discrimination
- (19) Supply and Demand of Jobs

(20) Situational Factors

- (21) Chance
- (22) Course of Least Resistance

(23) Psychosocial-emotional Factors

- (24) Fear of Failure
- (25) Fear of Success
- (26) Lack of Assertiveness
- (27) Lack of Confidence
- (28) Role Conflict

The combining of questions 1, 2, 3 and 4 comprises the Familial major factor. The Societal major factor includes the combination of questions 5 through 8. The Individual major factor encompases questions 9 through 14. The Socioeconomic major factor includes questions 15 through 19. Questions 20, 21 and 22 are combined in the Situational major factor. The Psychosocial-emotional major factor includes questions 23 through 28.

O'Neil et al (1978) used Hoyt's (1941) internal consistency reliabilities, standard error and test-retest reliabilities to test the reliability of the CFC. A four week period was used to establish test-retest reliabilities for the six CFC major factors. The following are reliability scores for each of the major factors: Familial (r_{tt} = .73); Societal (r_{tt} = .80); Socioeconomic (r_{tt} = .49); Individual (r_{tt} = .52); Psychosocial-emotional (r_{tt} = .83); Situational (r_{tt} = .52). The reliability for the total scale score is (r_{tt} = .83) (O'Neil & Ohlde, 1978, p. 14).

O'Neil, Ohlde, Tollefson, Barke, Piggott and Watts (1980b) specifically tested the validity of the CFC on a cross-sectional sample of high school, undergraduate and graduate students (N=1,436). Data were analyzed using factor analysis and analysis of variance procedures. Results indicated positive support for the O'Neil et al. model. The factor analysis indicated that the CFC measured the six major career factors identified by the O'Neil et al. model. A significant grade main effect and significant sex

X grade interactions were found for 4 of the 6 factors assessed.

Shaffer et al. (1982) describe 2 additional studies establishing construct validity of the CFC. Duncan (1986), as well incorporated the CFC into her study of career decision making of two groups of black college students in Pennsylvania and Mississippi, adding to the construct validity of the CFC.

Duncan (1986) compared her results to those of O'Neil et al. (1980b) who drew their conclusions from a predominantly white sample. Duncan's overall results indicate that the black students share the opinion that external factors play a more important role in career decision making than O'Neil et al.'s white sample.

Verbal permission was obtained from the author of the CFC, Dr. J. O'Neil, to modify some of the questions in order to enhance clarity and prevent misunderstandings. Questions 1, 2, 5, 6, 7, and 28 were re-written and incorporated into the modified version of the CFC administered in this investigation (Appendix B). The phrase "appropriate career choices" worded in questions 1, 2, 5, 6, and 7 of the original CFC (Appendix D) was considered confusing in the context used and therefore provided mixed meanings. This phrase was therefore reworded. In that this research involved high school students, references in question 28, referring to conflict of career and the role as father, mother, wife or husband were deleted leaving the remainder of the question intact.

Instrument C

Cultural Value Inventory

The Cultural Value Inventory (CVI) (Appendix A) is an instrument that attempts to identify a degree of cultural distinction between the non-Native and Native subjects in this study. The CVI was adapted and developed by the investigator from Richardson's (1981) listing of 37 differences in Indian and Anglo values (p.. 56 to 60 of this dissertation).

In order to attribute opinion differences on the CFC to the cultural uniqueness of the respondents, it was necessary to determine in some fashion, the degree of cultural differences between the Native and non-Native sample in an urban setting. An instrument was determined necessary due to the concern that assimilation or acculturation may have occurred within this sample resulting in CFC scores that were a result of other factors in addition to or instead of cultural group membership.

The CVI was therefore developed to attempt to determine if there were significant cultural value differences between the Native and non-Native subjects in this study.

Richardson (1981) claims there exists a major distinction between Indian and Anglo values when he states:

> Part of the dilemma in understanding the Indian is that the Anglos have never thought out their own value system.... no two races could so grossly differ in value systems than the American Indian and White. In fact, the phrase "value system" is hardly used in the White culture; but it appears constantly when Indian people are talking. (pp. 224-5)

Trimble (1981), in a thorough review of the literature pertaining to value differentials in counselling American Indians, offers the caution however of not generalizing to all Natives what may be determined from a small sample of responses on a value scale. Many of the numerous value statements outlined by Richardson, however, have been confirmed by others such as Kluckhohn and Strodtbeck (1961), Bryde (1971), Trimble (1981) and Couture (1988).

Face validity was determined by reviewing the CVI with educators, students and members of the Edmonton Native community. Construct validity was established in a pilot study by the investigator of 41 Native and 56 non-Native high school students in Edmonton during June of 1989. A two-way analysis of variance procedure with group and sex as the independent variables established significant differences between the Native and non-Native students in the overall scores. The results indicated that Native students endorsed the Native value statements to a greater degree than did their non-Native peers.

In developing the CVI from Richardson's 37 pairs of value statements, a number of changes were found necessary. From the total of 74 value statements 35 changes were made by the investigator. Most of the changes were for reasons of clarity. For example, Richardson's first Native value statement read as follows: "Happiness - this is paramount! Be able to laugh at misery; life is to be enjoyed." The concern that the term "paramount" may be misunderstood by

the high school sample necessitated its change to "most important". Richardson's "Orient yourself to the land" became "Focus yourself to the land". Richardson's "You're in America; speak English" became "You're in Canada; speak English or French".

Some value statements with obvious Native reference were changed to eliminate the possibility of response bias. The changes to these Native terms and references were made to mask obvious Indian-Anglo terminology. For example, Richardson's "Natives are used to small things, and they enjoy fine detail (Indian fires)" was altered to read "enjoy the fine detail and small things in life". Richardson's "Children are the gift of the Great Spirit to be shared with others" became "Children are a gift of God to be shared with others". Other statements required further explanation such as "Intuitiveness" becoming "Intuitiveness; use your own insight".

After providing a copy of Richardson's comparative value statements to members of the Native community additional changes were suggested because certain statements were considered too stereotypical and somewhat racist in content. Richardson's value statement "live like the animals; the animals are your brothers and sisters" was changed to read "live in harmony with the animals; animals are your brothers and sisters". Richardson's "Be simple - eat things raw and natural. Remember your brother the Fox and live wisely" was altered to read "Be simple - eat things

simply prepared and natural". In that the suggestion "the dirt of Mother Earth on a wound is not harmful but helpful (Sun Dance, mineral intake)" could be misinterpreted the value statement was changed to read "the earth provides natural healing agents that require no purification".

Through the use of a 6 point rating scale the respondents were asked to select one value statement from each pair of 37 sets of value statements and rate its importance. A response (1) rated the value statement on the left column as most important (2), the value statement on the left column is very important (3), the value statement on the left column is somewhat important (4), the value statement on the right column is somewhat important (5), the value statement on the right column is very important and (6), the value statement on the right column is most important. This rating method determined the degree of importance of that particular value statement to each respondent and forced each student to make a definitive decision between the two distinct Native and Anglo value statements in each set.

To prevent response bias, the 37 pairs of Native and Anglo value statements in each set were randomly ordered for placement in the left or right column of the questionnaire (Appendix A).

The Native value statements in the left column of the questionnaire are numbered 1, 3, 4, 8, 9, 12, 16, 17, 18, 21, 22, 24, 27, 29, 30, 32, 33, 34, and 35.

The Native value statements in the right column are numbered 2, 5, 6, 7, 10, 11, 13, 14, 15, 19, 20, 23, 25, 26, 28, 31, 36, and 37.

The Anglo value statements in the left column of the questionnaire are numbered 2, 5, 6, 7, 10, 11, 13, 14, 15, 19, 20, 23, 25, 26, 28, 31, 36, and 37.

The Anglo value statements in the right column are numbered 1, 3, 4, 8, 9, 12, 16, 17, 18, 21, 22, 24, 27, 29, 30, 32, 33, 34, and 35.

For purposes of analysis, a recoding of the rating scores of importance was required for value sets 2, 5, 6, 7, 10, 11, 13, 14, 15, 19, 20, 23, 25, 26, 28, 31, 36 and 37. Rating scores for these sets only, were recoded in the following manner: 6 "most important" was changed to 1 "most important", 5 "very important" was changed to 2 "very important", 4 became 3, 3 became 4, 2 became 5, and 1 became 6. This recoding permitted all rating scores of importance 1, 2 and 3 to be attributed to the 37 Native value statements in each set and conversely, all of the rating scores of importance 4, 5, and 6 could then be ascribed to all of the 37 Anglo value statements in each set.

Means were calculated by attributing the following values to scale scores; (1) Native value statement from each set is most important, (2) Native value statement is very important, (3) Native value statement somewhat important, (4) Anglo statement from each set is somewhat important, (5)

Anglo Statement is very important and (6) Anglo statement is most important.

Instrument D

Pineo-Porter Occupational Prestige Scale

The importance, meaning and measurement of socioeconomic status (SES) are topics well documented in the literature (Caplow, 1959; Crites, 1969; Hauser and Featherman, 1977; Hurst, 1979; Lipsett, 1962; Mueller and Parcel, 1981; Vanfossen, 1979). Their theories and research provide evidence that variations in socioeconomic status are an irrefutable fact of life in all cultures. As in any population, the individual and the individuals' families in this research vary in their current access to occupations, income, assets, power, prestige, education, health care, the legal system and other social and economic variables. There may exist an implicit assumption that the Native and non-Native students attending high school in Edmonton are homogeneous with respect to SES. To test this impressionistic assumption and to control for the role SES may have on opinions regarding career decision making the Pineo and Porter (1967) Occupational Prestige Scale for Canada was utilized to determine SES of all respondents.

The selection of this occupation-based measure of SES was derived from conclusions in the literature.

Mueller and Parcel (1981) in their review of the literature on measures of SES state:

> That in the study of social stratification three dimensions - economic, power and prestige are theoretically relevant. That is, these are the most valued commodities in society. They exist as rewards, resources and privileges and thus may serve as the basis for the ranking of members.
> (p. 15)

They conclude that over the past several decades there is considerable agreement that occupation based measures of SES represent the most reliable and valid single measure of an individual's position on the economic power and prestige dimensions.

Duncan (1961) and Blau and Duncan (1967) also argue for the central position of occupations as the best indicator of SES because occupation serves as the basis of income, authority, control over others and resources as well as prestige.

Hurst (1979) and Vanfossen (1979) agree that occupational hierarchies exist and that occupations can be ranked by the attitudes of people and by the degree of advantage inherent in them.

> Some occupations give a higher income, entail more pleasant duties, involve more exercise of power, allow more fringe benefits, and are more conducive to a sense of self-worth than are others.
> (Vanfossen, 1979, p. 79)

Although the determination of SES using occupational measures is well accepted, three current issues regarding data collection require clarification: proxy reporting, determining which parent heads a household and determining SES when both parents are employed. Mueller and Parcel (1981) report findings of research of Mason, Hause, Kerchoff

and Poss (1976) on proxy reporting of parental occupation. Their findings indicate that young school children below the ninth grade cannot accurately report parental occupation, but the reports of those between ninth and twelfth grade are as accurate as those of their parents. Mueller and Parcel (1981) conclude that proxy reports about parents occupation by children above ninth grade are very reliable.

Most previous research regarding measuring SES relates to the traditional nuclear family where the measurement of the family (household) social status was to assume the household head was male and it was he who provided the source of social status to the family. The increase of single parent families and the increased labor market participation of mothers has resulted in a need to alter measurement techniques.

> The convention in sociology at this time is to assume that male and female incumbents of the same occupation have equal prestige.
> (Mueller & Parcel, 1981, p. 22)

and

> If the mother is the dominant caretaker of the child, then it could be her social status which would influence development directly, with father's status possibly playing a much lesser indirect role.
> (Mueller & Parcel, 1981, p. 23)

A third concern in measuring SES of households stems from the growing numbers of families when both mother and father work. Although attempts have been made to determine empirically SES of a variety of family situations, the measures have seen little use and cautions prevail regarding

their techniques and strategies (Nock & Rossi, 1978; Ross, Sampson & Bose, 1974; Sampson & Rossi, 1975).

Hauser and Featherman (1977) and Mueller and Parcel (1981) conclude that a single occupation based scale such as the Duncan Socioeconomic Index (Duncan, 1961) or the Seigal Prestige Scale (Hauser and Featherman, 1977) which have been validated in terms of their relationship to commonly accepted stratification dimensions, should be used by all social science disciplines to determine the SES of individuals or household heads. Unfortunately, both scales are based on American Census data, American respondents and American coding systems.

Tuckman (1947) attempted to construct an adequate socioeconomic status scale for Canada. He believed that occupations that are rated high in social prestige require considerable ability and education and provide better than average pay and good working conditions.

It was not until 1958 that Blishen, using the 1951 Canadian Census data, constructed a socioeconomic scale suitable for this country. Scores were determined by mean income and average number of years of schooling for 343 occupations. Blishen's scale correlated .94 with Hatt's (1953) National Opinion Research Centre Index, the first major scale of its kind in the United States.

In comparing Blishen's scale to the Tuckman Scales, 18 of 25 Tuckman Scales correlated .91 with Blishen's Canadian Occupational Scale.

Pineo and Porter (1967) replicated a National Opinion Research Centre ranking of 200 occupations in Canada. Ultimately, 204 occupational titles were developed for Canadian use in both French and English. In addition to the ranking of occupations Pineo and Porter elicited information pertaining to work experience; industries and corporations; mobility; religion; attitudes toward education and interethnic relations. The study reported that the principal element entering into status was occupation. The study also determined the Blishen Scale correlated .93 with 57 closely matching titles and .88 with 57 poorly matched titles of the Pineo and Porter Scale. A correlation of .98 between the Pineo and Porter Scale and the National Opinion Research Index was also reported.

On the basis of the research cited, the Pineo and Porter Occupational Prestige Scale was judged to be most appropriate for use in the present study to determine socioeconomic status of the respondents.

The Pineo & Porter Scale (1967) ranks all occupations into 8 status levels:

1. Professional
2. Proprietors, Managers, and Officials, Large
3. Semi-Professional
4. Proprietors, Managers and Officials, Small
5. Skilled
6. Clerical and Sales
7. Semi-Skilled
8. Unskilled

For the purposes of this research a students SES on one of the levels 1 to 8 was determined from either the father or the mother's occupation if only one parent was employed. In situations where both parents were employed, the student's SES was determined by the highest ranking occupation on the Pineo and Porter Scale. Students residing with parents who were unemployed, who were students themselves or who were on social assistance, were provided the lowest ranking.

The investigator ranked occupations identified by the subjects not listed on the Pineo and Porter Scale. Numerous new occupations have developed since the scale was first devised in 1967. The ranking of these new occupations was based on similar responsibilities, duties and job characteristics as those presently on the Scale.

Pilot Study

In conducting educational research incorporating new instruments it is recommended that pilot testing be performed in order to evaluate the instruments and procedures used in their implementation.

> It is usually highly desirable to run a pilot test on a questionnaire and to revise these questionnaires based on the test results. (Tuckman 1988, p. 223)

A pilot study was considered necessary for 2 reasons:

(1) to test the formulated hypotheses and

(2) to test the instruments and procedures.

The pilot study occurred between June 7 and June 21, 1989 and incorporated the use of the two opinionnaires, CFC and CVI, and a background information questionnaire.

Results from the analysis of data obtained from 41 native and 56 non-Native Edmonton high school students provided evidence that: (1) The newly developed Cultural Value Inventory assisted in discriminating between the cultural values of the Native and non-Native students and (2) that the use of the Career Factor Checklist determined significant differences of opinion between the two groups on factors influencing career decision making. Pilot study results provided the impetus to incorporate into the final study, questions pertaining to the socio-economic status of the respondents. The same questionnaire format incorporated into the pilot study was used with the subjects in the final research.

Procedure and Design

Project Approval

Prior written approval for this study was obtained from the Ethics Committee, University of Alberta; (Appendix E) Edmonton Separate (Catholic) School Board, (Appendix F); and the Edmonton Public School Board (Appendix G). Permission was obtained to randomly sample 150 Native and 150 non-Native high school students from each of the school districts. Verbal permission was obtained from the author

of the CFC, Dr. J. O'Neil, in April, 1989 to abridge and use his instrument in this research.

Sample Selection

The following procedures were followed to obtain the sample of Native and non-Native high school students from both Edmonton School jurisdictions.

Student Sample - Edmonton Separate School Board

All Native students identified from registration forms were initially considered as potential subjects for this study.

The original list of Native students provided to the investigator by the Native Studies Department of ESSB in October, 1989, comprised a total number of 274. Thirty students were excluded due to their participation in the investigator's pilot study of June, 1989. One hundred fifty Native students were then randomly sampled and identified for inclusion in the study in November, 1989. After data gathering had begun, it became very evident that many Native students had dropped out of school, some were non-attendees and some were not willing to participate. The investigator therefore determined that the entire population of Native students attending classes in the Separate School District required inclusion in the study. One hundred seven Native students ultimately completed questionnaires. The balance were identified as (1) dropouts, (2) infrequent attendees, or (3) non-willing participants. Four of the Native students responded with numerous response errors in their

questionnaires resulting in the necessity to exclude them from the study. Table 10 lists the final total number of Native students included in this study from the ESSB (n=103).

The non-Native students participating in this study attending Edmonton Separate Schools, were randomly sampled in near equal numbers to their Native peers from the same high schools the Native subjects attended. One hundred twenty-four non-Native ESSB students were administered questionnaires with 9 questionnaires having to be discarded due to errors in response. Table 10 lists the 115 ESSB non-Native students that were ultimately incorporated into this research.

Table 10

Total Number of Native and Non-Native Study Participants by High School and School Board

Name of High School	Native		Non-Native	
Archbishop Macdonald	2		3	
Archbishop O'Leary	13		16	
Austin O'Brien	3		4	
Holy Trinity	4		4	
Louis St. Laurent	1		-	
St. Francis Xavier	17		15	
St. Joseph Composite	63		73	
Subtotal ESSB		103		115
Jasper Place Composite	13		13	
Victoria Composite	16		14	
W. P. Wagner	5		6	
Subtotal EPSB		34		33
Grand Total	137		148	

Student Sample - Edmonton Public School Board

As a result of prior consultation with administrators and Native counselling personnel, three EPSB high schools were determined to have at least 175 Native students attending classes. In order to obtain the Native sample and in view of the fact no formal records of Native high school students are maintained, the investigator required the assistance of inschool personnel to assist in this process. The school administrators, counselling staff and individual teachers assisted the investigator in obtaining a Native student sample, but far short of the 150 students desired.

From previous knowledge of students' Native status, the personnel from Jasper Place Composite High School and Victoria Composite High School elicited the involvement of as many students as possible. Names of students provided by Sacred Circle personnel, a Native cultural and counselling program with EPSB, also assisted by providing names of Native students in the 3 high schools. In that the staff from W.P. Wagner High School indicated no knowledge of Native students enrolled in their school, they circulated information regarding the investigator's study to all classes to obtain volunteers. Thirty-six EPSB Native students completed questionnaires with 2 questionnaires containing unusable data. Table 10 lists the total number

of EPSB Native students (n=34) participating in this research.

Serious consideration was given to expanding this research to additional EPSB high schools. However, due to the large dropout rates in the ESSB sample, the lack of formal registration records for Native students in the EPSB, the few students identified in the three high schools determined to have the largest number of Native students and the time frame required to complete the research, it was decided not to attempt to increase the sample.

The non-Native sample from the EPSB was randomly selected from the total number of non-Native students attending the same three high schools as their Native peers included in this study (n=36). Three students provided unusable data. Table 10 identifies the final total number of EPSB non-Native students participating in this research (n=33).

Distribution and Collection of Questionnaires

All Native and non-Native students selected to participate in this study were administered questionnaire packages in their home schools between Dec. 10, 1989 and Feb. 2, 1990. All high schools participating in this study were contacted by the writer to arrange specific dates for administration, student release time and location for administering the instruments.

The background information questionnaire, the modified Career Factor Checklist (CFC) and the newly developed Cultural Value Inventory (CVI) were administered to all subjects in approximately a 30 minute time period. All questionnaires were administered by the investigator or his designates who were trained in the administration of the questionnaire and provided with the same instructions (Appendix H). The same format and procedures in introducing the study and administering the instruments were utilized for both samples.

Students absent at the time of test administration were given a minimum of 2 callbacks. All students were asked to voluntarily participate and were provided with a covering letter regarding the study (Appendix I). Assurances of personal confidentiality were underscored with all subjects. Students requesting completed study results will receive them upon completion of this research.

The CVI and CFC were randomly presented in the questionnaire packages. This randomized order of presentation minimized any possible effect the order of the CVI or CFC may have had on responses of students to these questionnaires.

In order to prevent confusion in the dissemination and collection of the questionnaires, the Native and non-Native questionnaires were administered to the students in separate groups and on separate occasions.

All completed questionnaires were visually scanned by the investigator for missing or unusable data. Students submitting questionnaires with missing data were contacted by the investigator to determine if missing data were intentional. Answers were given to the investigator for inclusion on the questionnaires when the subjects indicated an oversight.

Method of Analysis

Profiles were developed for the Native and non-Native samples participating in this study. Demographic data obtained were subjected to chi-square analysis to determine if significant differences existed between the 2 samples.

Hypothesis I was tested using a two-way ANOVA with group membership and sex as the independent variables and the total scores on the CVI as the dependent variable.

To test Hypotheses II, III, IV, V and VI multiple analysis of variance procedures (MANOVA) were performed to establish in which areas there were differences between the 2 samples. MANOVA attempts to analyze the differences between groups in terms of several variables considered simultaneously (Hand and Taylor, 1987; Tuckman, 1988).

To test Hypotheses II, a one-way MANOVA was performed with group membership as the independent variable and the 6 major factors on the CFC the dependent variables.

To test Hypothesis III and IV, scale opinion scores were subjected to a Group X Gender MANOVA. Group and Gender are the independent variables and the 6 major CFC factors the dependent variables.

Hypothesis V was tested using a one-way MANOVA design with residency experience on an Indian reserve, Metis colony/settlement or both as the independent variable and the six major career factors on the CFC as dependent variables.

To test Hypothesis VI, a one-way multivariate analysis of variance (MANOVA) was conducted with Native status as the independent variable and the six major factors on the CFC as dependent variables.

In addition to testing the six hypotheses, multivariate analysis of variance procedures (MANOVAS) were computed for selected background variables. When MANOVA results indicated significant overall main effects or interactions univariate analyses were then examined. Statistical procedures were incorporated in the computerized statistical analysis package, $SPSS_X$ (Norasis, 1985).

Significant interactions were explained using additional $SPSS_X$ procedures to localize, if possible, the specific differences which produced the overall significant results.

For the purpose of this investigation, the .05 level of significance was selected.

CHAPTER IV

RESULTS

Introduction

This chapter will provide results of analysis of opinions expressed on the CVI by the Native and non-Native students. Secondly, results from analysis of opinions obtained from the CFC is provided to illustrate if significant differences exist within and between the 2 groups on the 6 major factors. Thirdly, results from the analysis of the influence of certain background variables on the opinions of respondents on the CFC is examined. Fourthly, descriptive data characterizing the Native and non-Native student responses to the CFC is presented. Finally, results obtained from this study are compared to those of O'Neil et al. (1980b) and Duncan (1986).

Results - Hypothesis I

Hypothesis I states the following: There are no significant differences between Edmonton Native high school students and Edmonton non-Native high school students on their rating of 37 pairs of cultural value statements as measured by opinions expressed on the Cultural Value Inventory (CVI).

Hypothesis I was formulated to determine if cultural differences exist between the urban Native and non-Native students participating in this study. The data obtained

from the opinions on the Cultural Value Inventory (CVI) were subjected to a two-way analysis of variance (ANOVA) procedure with group and sex as the independent variables. Results from the analysis (Table 11) established no significant differences between the opinions of the Native and non-Native students $F(1,282)=2.075$, $p=.151$. No group or gender main effect differences were determined nor were two-way interactions obtained. In that no significant differences in total scores were obtained between the Native and non-Native students from their opinions to the Native and non-Native value statements on the CVI, Hypothesis I was therefore supported.

Table 11

ANOVA Results of Mean Differences Between the Opinions of Native and Non-Native and Male and Female Students Obtained from CVI Scores

Source of Variation	Sum of Squares	Df	F	Probability
Group	.392	1	2.075	.151
Gender	.278	1	1.472	.226
Group X Gender	.584	1	3.093	.080
Residual	53.087	281		

Hypotheses II through IV were formulated to show if Native and non-Native Edmonton high school students differed in their opinions regarding the 6 major CFC factors influencing their career decision making.

Results - Hypothesis II

Hypothesis II is stated as follows: There are no significant differences between Edmonton Native high school students and Edmonton non-Native high school students on the rating of each of the six major factors affecting career decision-making as measured by the Career Factor Checklist (CFC). The purpose of the second hypothesis was to determine what differences might exist between Native and non-Native students on their ratings of the six major factors affecting career decision-making as measured by the CFC.

To test this hypothesis, a one-way MANOVA was performed with group membership as the independent variable and the six major factors on the CFC as dependent variables. Results applying Pillais's multivariate test of significance indicated no significant group main effect, $F(6,273) = 1.849$, $P=.090$.

Results of the analyses warrant the acceptance of Hypothesis II in that no significant differences were obtained between the opinions of Native and non-Native students on the 6 major factors influencing career decision making on the CFC.

Results - Hypothesis III

Hypothesis III is stated as follows: There are no significant differences between Native Edmonton male high school students and non-Native Edmonton male high school

students on the rating of the six major factors affecting career decision making as measured by the CFC.

Hypothesis III was tested to determine if male opinion of the six CFC major factors affecting career choice would be influenced by cultural group membership.

To test Hypothesis III, a two-way MANOVA with group and gender as the independent variables was performed across the six major factors on the CFC. Table 12 shows the results of the Pillais multivariate tests of significance. No significant overall group or gender main effects were obtained nor were significant group by gender interactions evident. MANOVA results yield support for Hypothesis III.

Table 12

Multivariate Tests of Significance of MANOVA'S on the CFC for the Combined Population of Native and Non-Native Students: Categories Group, Gender and Group X Gender

Category	Pillais Value	Exact F	Hypoth Df	Error Df	Sign of F
Group	.03605	1.68940	6.00	271.00	.124
Gender	.01348	.61734	6.00	271.00	.716
Group X Gender	.01959	.90262	6.00	271.00	.493

Results - Hypothesis IV

Hypothesis IV is stated as follows: There are no significant differences between Edmonton female Native high

school students and Edmonton female non-Native high school students on the rating of the six major factors affecting career decision making as measured by the CFC.

Hypothesis IV was tested to determine if female cultural group membership of the respondents would result in significant differences in opinion between the cultural groups on the six major factors of the CFC affecting career decisions. The same method of analysis used in Hypothesis III was employed to test this hypothesis.

Results obtained from multivariate tests of significance (Table 12) indicate that Hypothesis IV is affirmed.

Results - Hypothesis V

Hypothesis V is stated as follows: There are no significant differences between Native students who have lived on a reserve, Metis colony/settlement or both, and those Native students who have not had this residency experience on the rating of the six major factors affecting career decision-making as measured by the CFC.

This hypothesis attempts to provide information on whether Natives living on a reserve, Metis colony/settlement or both have differing opinions to Natives not having had this cultural experience.

Mean scores obtained from Native students who lived on a reserve, colony/settlement or both resulted in the following ranking of the 6 CFC major factors: Individual (4.24), Familial (3.25), Societal (3.08), Situational

(2.80), Psychosocial-emotional (2.77) and Socioecomic (2.73). Native students who did not have this unique cultural experience exhibited the following mean scores: Individual (4.30), Societal (3.17), Familial (3.17), Psychosocial-emotional (2.69), Situational (2.64) and Socioeconomic (2.60).

Hypothesis V was tested using a one-way MANOVA design with residency experience on an Indian reserve, Metis colony/settlement or both as the independent variable and the six major career factors on the CFC as dependent variables. Pillais results indicated no significant overall main effect, $F(6,126) = .514$, $p = .797$. Hypothesis V is therefore supported.

Results - Hypothesis VI

Hypothesis VI is stated as follows: There are no significant differences between Indian Edmonton high school students and Metis Edmonton high school students on the rating of six major factors affecting career decision making as measured by the CFC.

The hypothesis attempted to ascertain if differences in opinion of the six CFC major factors is influenced by Native status.

The CFC mean scores obtained from the Indian high school students are as follows: Individual (4.30), Societal (3.18), Familial (3.12), Socioeconomic (2.74), Psychosocial-emotional (2.74) and finally Situational (2.73). The following are mean scores obtained from the Metis students:

Individual (4.23), Familial (3.23), Societal (3.08), Psychosocial-emotional (2.74), Situational (2.70) and Socioeconomic (2.58).

To test this hypothesis, a one-way multivariate analysis of variance (MANOVA) was conducted with Native status as the independent variable and the six major factor scores on the CFC dependent variables. The data obtained from the two Inuit respondents were not entered into the analysis.

Results applying Pillais criterion indicated no significant overall status effects $F(6,124) = .486$, $p = .818$. The Indian and Metis Edmonton high school students did not rate the six CFC factors significantly different therefore Hypothesis VI is supported.

In addition to testing the 6 formulated hypotheses, the investigator conducted additional MANOVAS to determine the influence of the following variables on the 6 major factor scores on the CFC: Group X How long respondents lived in Edmonton, Group X Program registered at high school, Group X socioeconomic status, Group X grade, How long respondents lived in Edmonton, program registered at high school, socioeconomic status and grade.

Table 13

Multivariate Tests of Significance of MANOVAS on the CFC for the Combined Population of Native and Non-Native Students: Categories Group X How Long, Group X Program, Group X SES, Group X Grade, How Long, Program, SES and Grade

Category	Pillais Value	F	Hypoth Df	Error Df	Sign of F
Group X How Long	.02771	.41492	18.00	801.00	.985
Group X Program	.04359	.94312	12.00	508.00	.503
Group X SES	.01832	.96323	30.00	1305.00	.524
Group X Grade	.03332	.76241	12.00	540.00	.690
How Long	.07647	1.16390	18.00	801.00	.285
Program	.11749	2.64205	12.00	508.00	.002
SES	.12497	1.11509	30.00	1305.00	.306
Grade	.08178	1.91859	12.00	540.00	.030

Table 13 shows the results of Pillais multivariate tests of significance for each MANOVA performed. None of the four 2-way MANOVAS yielded significant results. Two of the four one-way MANOVAS, Program and Grade provided significant findings. As a followup to the significant MANOVAS univariate F tests were examined and presented in Table 14 for the effect of program registered in at high school.

Table 14

Summary of Results of One-Way MANOVA: High School Program Differences on the 6 Major Factors of the CFC

Independent Variable	Df	Dependent Variables	Df	F Value	Prob.	Univariate Significant Contrasts
Program Registered in High School	2	Familial	258	.76923	.464	
		Societal	258	1.76653	.173	
		Individual	258	3.45149	.033	3 > 2 > 1
		Socioeconomic	258	4.80396	.009	3 > 2 > 1
		Situational	258	2.38981	.094	
		Psychosocial Emotional	258	3.42634	.034	3 > 2 > 1

Note: Academic/Advanced = 1
General = 2
Vocational/Tech = 3

The results of the univariate F tests indicate significant difference between the opinions of students registered in different high school programs on how they rated three of the six CFC major factors, Individual, Socioeconomic and Psychosocial-emotional. The Scheffé Test (Tuçkman, 1988) was used to determine specific differences among the respondents from different high school programs. For all three major factors, students in the vocational technical program rated these factors as having more importance than students in the general program who in turn

rated all three factors more importantly than the academic/advanced diploma program students.

Although the results of the one-way MANOVA with grade as the independent variable yielded significant findings (Table 13) the examination of the univariate F statistics for the main effect of grade on the rating of the 6 CFC major factors showed no significant differences between grade 10, 11 and 12 students. Results approaching significance however, were indicated for the Individual major factor ($p=.062$) and for the Psychosocial-emotional major factor ($p=.053$). The Scheffé Test was applied to determine specific grade differences. The following results were obtained: (1) Grade 12 students rated the Individual CFC major factor as more important than Grade 11 students. In turn, grade 11 students reported this major factor more important than grade 10 students. (2) The reverse grade order was noted for the importance of the psychosocial-emotional factor with grade 10 students rating this factor more important than grade 11 students who in turn rated this factor more important than grade 12 students.

Profiles of Native and Non-Native Responses to the CFC Factors

While no significant differences were obtained between the opinions of Native and non-Native students on the 6 major factors comprising the CFC, the following section

provides some interesting descriptive data regarding their opinions.

The response categories on the CFC were assigned the following values for data analysis: (5) "strong effect", (4) "moderate effect", (3) "unsure of effect", (2) "weak effect", and (1) "no effect". Table 15 shows the means and standard deviations for the six major factors and the grand mean totals for the Native students. Grand mean scores for each of the major factors were ranked in the following order for the total Native population: Individual (4.28), Familial (3.18), Societal (3.11), Psychosocial emotional (2.73), Situational (2.72) and Socioeconomic (2.66).

Native males rated the Individual major factor as having the greatest impact in grade 12 (4.39) and by females at the grade 11 level (4.40). The Familial major factor was rated as most important by grade 11 females (3.63) and grade 11 males (3.30). The Societal major factor was rated as most important by grade 10 males (3.35) and by grade 11 females (3.22). Psychosocial-emotional major factors to career decision-making were ranked highest by the grade 10 females (3.07) and by the grade 10 males (2.77). The Situational major factor was ranked as having the greatest impact for grade 10 males (2.91) and grade 12 males (2.83). Grade 10 females ranked this factor the most important from all three grade levels (2.75). The Socioeconomic major factor was rated as the most important for grade 11 females (2.89) and grade 10 male students (2.85).

Table 15

Means and Standard Deviations of the 6 Major Factors on the CFC for Native Males and Females in Grade 10, 11, and 12

Educational Level		Familial		Societal		Individual		Socioeconomic		Situational		Psychosocial-emotional	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Grade 10	M	3.11	3.01	3.35	3.12	4.25	4.04	2.85	2.57	2.91	2.75	2.77	3.07
	SD	.91	1.14	.85	.93	.59	.68	.82	.99	.81	.83	.93	1.06
Grade 11	M	3.30	3.63	2.91	3.22	4.14	4.61	2.47	2.89	2.67	2.72	2.28	2.90
	SD	1.04	.77	.68	.90	.85	.35	.84	.91	.67	.91	.90	.86
Grade 12	M	3.17	3.10	2.95	2.97	4.39	4.40	2.43	2.69	2.83	2.42	2.49	2.38
	SD	1.11	1.05	.80	.99	.54	.50	.69	1.02	.96	.80	1.10	.87
Grand Mean Total Population		3.18		3.11		4.28		2.66		2.72		2.73	

Table 16 displays the means and standard deviations for the major factors and the grand mean totals for the non-Native population. Grand mean scores for each of the major factors were ranked in the following order: Individual (4.34), Familial (3.07), Societal (3.07), Situational (2.59), Psycho-social emotional (2.50) and finally, Socioeconomic (2.35).

Table 16

Means and Standard Deviations of the 6 Major Factors on the CFC for Non-Native Males and Females in Grade 10, 11, and 12

Educational Level		Familial		Societal		Individual		Socioeconomic		Situational		Psychosocial-emotional	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Grade 10	M	3.29	3.00	2.93	2.99	4.31	4.19	2.13	2.07	2.76	2.57	2.52	2.69
	SD	.87	.78	1.04	.93	.67	.78	.81	.70	.79	1.06	.96	1.18
Grade 11	M	3.07	3.13	3.29	2.92	4.25	4.40	2.52	2.49	2.70	2.67	2.57	2.29
	SD	.89	1.06	.76	.68	.69	.61	.92	.69	.95	1.01	.76	.86
Grade 12	M	2.82	3.21	2.84	3.31	4.25	4.50	2.26	2.45	2.38	2.62	2.41	2.49
	SD	.91	1.01	.79	.83	.75	.47	.71	.73	.83	.97	.98	.89
Grand Mean Total Population		3.07		3.07		4.34		2.35		2.59		2.50	

The Individual major factor was rated as having the strongest effect by grade 12 females (4.50) and grade 11 females (4.40). This factor was ranked most important by grade 10 males (4.31). The Familial major factor was ranked as having the most impact for grade 10 males (3.29) and by grade 12 females (3.21). Grade 12 females (3.31) ranked the Societal major factor as most important as did grade 11 males (3.29). Responses to the importance of the Situational major factor were highest for grade 11 (2.67) and grade 12 (2.62) females. Grade 10 males ranked this major factor as having the greatest impact (2.76). The Psychosocial-emotional major factor was rated the highest by grade 10 females (2.69) and grade 11 males (2.57). Finally, the Socioeconomic major factor was rated by grade 11 females (2.49) and grade 12 females (2.45) as having the most impact on career decision-making while males in grade 11 regarded this factor as most important (2.52).

Both Native and non-Native students view the Individual major factor as having the strongest effect (Table 17). Native students perceive the Familial major factor as second in importance followed by the Societal major factor. Non-Native students are of the opinion that these two factors have similar influences and rank both of them second in importance. Native and non-Native students agree that the Socioeconomic major factor has the least influence on their career decision-making. Natives ranked the Psychosocial-emotional major factor as 4th in importance and the

Situational major factor 5th while the non-Native subjects reversed this order.

Table 17

Grand Mean Scores of the 6 Major Factors on the CFC for Native and Non-Native Students

Category	Native Means	Non-Native Means
Familial	3.18	3.07
Societal	3.11	3.07
Individual	4.28	4.34
Socioeconomic	2.66	2.35
Situational	2.72	2.59
Psychosocial-Emotional	2.73	2.50

Table 18 provides data listing the mean scores and the ranking by Native and non-Native males and females of the importance of the 6 CFC factors. Native and non-Native males and females ranked the Individual major factor most important in career decision making. Native males and females and non-Native females believe the Familial major factor to be 2nd in importance and the Societal major factor 3rd in importance. Non-Native males reversed this order placing the Societal factor second and Familial third. All males ranked the Situational major factor 4th as did non-Native females. Native females ranked Psychosocial-emotional major factor 4th, relegating the Situational factor to the least important 6th ranking. Native males and

females ranked the Socieconomic major factor 5th while non-Native males and females ranked this factor 6th.

While Native females ranked the Psychosocial-emotional major factor 4th in importance, non-Native males and females ranked it 5th and Native males 6th.

Table 18

Mean Scores and Ranking of the 6 Major Factors on the CFC for Native and Non-Native Males and Females

Category	Native Males	Rank	Non-Native Males	Rank	Native Females	Rank	Non-Native Females	Rank
Familial	3.17	(2)	3.00	(3)	3.19	(2)	3.14	(2)
Societal	3.13	(3)	3.13	(2)	3.10	(3)	3.13	(3)
Individual	4.27	(1)	4.25	(1)	4.28	(1)	4.40	(1)
Socioeconomic	2.64	(5)	2.32	(6)	2.68	(5)	2.37	(6)
Situational	2.82	(4)	2.56	(4)	2.64	(6)	2.62	(4)
Psychosoc-emot.	2.58	(6)	2.48	(5)	2.83	(4)	2.48	(5)

Table 19 displays the percentage of responses from the Native and non-Native students on each of the five scales on the CFC. The Table combines the data for each of the general factors and the 22 subfactors. Native and non-Native students reported that the 6 general factors had an impact on their career decision-making however, the range of responses was large. The percentages for "strong effect" expressed by the Native students on the six general factors were ranked in the following descending order: Individual (64.2), Familial (23.4), Societal (21.2), Socioeconomic (14.6), Psychosocial emotional (11.5) and Situational (6.6). The non-Native percentages of responses on the "strong

effect" of the six general factors were as follows: Individual (73.0), Societal (19.6), Familial (18.9), Psychosocial emotional (14.2), Situational (8.1), and finally, Socioeconomic (6.8).

Table 19

Percentages for Each of the Five Scales on the CFC for General Factors and Subfactors of the Total Native and Non-Native Population

Category	Strong Effect		Moderate Effect		Unsure of Effect		Weak Effect		No Effect		Missing Data	
	Native	Non-Native	Native	Non-Native	Native	Non-Native	Native	Non-Native	Native	Non-Native	Native	Non-Native
					FACTOR 1							
Familial	23.4	18.9	35.8	41.2	7.3	4.7	16.8	24.3	16.8	10.8		
Subfactors:												
Childhood Ex.	19.7	15.5	29.2	39.2	6.6	5.4	21.9	27.0	22.6	12.8		
Mother's Role	23.4	18.2	36.5	23.0	5.1	4.1	17.5	33.8	17.5	20.9		
Father's Role	24.8	20.9	22.6	25.7	12.4	5.4	15.3	23.0	23.4	24.3	1.5	.7
					FACTOR 2							
Societal	21.2	19.6	34.3	42.6	5.1	2.7	26.3	24.3	13.1	10.1		.7
Subfactors:												
Educ.Exp.	46.0	43.2	35.0	35.1	1.5	1.4	11.7	14.9	5.8	5.4		
Peer Grp.	6.6	9.5	28.5	19.6	3.6	1.4	34.3	40.5	37.0	29.1		
Mass Med.	11.7	6.8	23.4	27.0	5.1	2.0	35.8	40.5	24.1	23.6		
					FACTOR 3							
Individual	64.2	73.0	24.8	20.3	3.6	1.4	5.1	3.4	2.2	2.0		
Subfactors:												
Self-Expect.	55.5	62.8	31.4	28.4	4.4	-	6.6	6.8	2.2	2.0		
Abilit.	55.5	62.2	37.2	27.0	3.6	2.7	3.6	8.1	-	-		
Interests	46.7	51.4	35.8	34.5	3.6	.7	10.9	10.1	2.9	3.4		
Need to Achieve	59.9	60.8	29.2	31.1	3.6	.7	5.1	4.1	1.5	3.4		.7
Attitudes	36.5	37.8	41.6	41.2	2.2	3.4	15.3	13.5	4.4	4.1		
					FACTOR 4							
Socioeconomic	14.6	6.8	32.1	18.9	7.3	8.1	32.1	37.2	13.9	29.1		
Subfactors:												
Social Class	19.0	18.9	30.7	22.3	2.9	5.4	26.3	28.4	21.2	25.0		
Race Discrim.	13.9	2.7	15.3	6.8	8.0	8.1	16.1	12.2	26.7	70.3		
Sex Discrim.	3.6	1.4	11.7	5.4	5.1	8.8	24.1	20.9	55.5	63.5		
Suppl & Demand	17.5	23.0	32.1	37.2	7.3	5.4	27.7	21.6	14.6	12.8		.7

Table 19

Percentages for Each of the Five Scales on the CFC for General Factors and Subfactors of the Total Native and Non-Native Population (Continued)

Category	Strong Effect		Moderate Effect		Unsure of Effect		Weak Effect		No Effect		Missing Data	
	Native	Non-Native	Native	Non-Native	Native	Non-Native	Native	Non-Native	Native	Non-Native	Native	Non-Native
					FACTOR 5							
Situational	6.6	8.1	24.1	23.6	20.4	20.3	32.1	32.4	16.8	15.5		
Subfactors												
Chance	10.2	6.1	26.3	23.0	16.1	14.9	31.4	36.5	16.1	19.6		
Least Resist.	2.9	6.8	30.7	18.2	16.1	11.5	25.5	37.8	24.1	25.7		.7
					FACTOR 6							
Psycho.-emot	11.5	14.2	29.9	21.6	5.8	8.1	27.0	27.7	19.7	28.4		
Subfactors:												
Fear of Failure	22.6	20.3	21.9	27.0	3.6	4.1	29.2	29.7	22.6	18.9		
Fear of Success	10.9	6.8	14.6	11.5	5.8	8.1	24.1	25.7	44.5	48.0		
Lack of Assert.	15.3	8.1	24.8	20.9	9.5	10.1	21.2	27.7	28.5	33.1		
Lack of Confid.	15.3	12.2	23.4	14.9	2.9	4.1	28.5	30.4	29.9	38.5		
Role Conflict	14.6	10.8	27.7	19.6	8.8	5.4	18.2	31.1	30.7	33.1		

The subfactor reported as having the strongest effect included in the Individual major factor was "need to achieve" for the Native subjects (59.9) and "self expectancies" for the non-Native students (62.8). Both groups ranked "father's role model" as the subfactor subsumed under the Familial major factor as having the strongest effect. Twenty-four point eight percent of the Natives responded to this subfactor compared to 20.9 for non-Native. Peer group influences ranked the most influential subfactor under the Societal major factor for both Natives (46.0) and non-Natives (43.2). The subfactor "supply and demand of jobs" was ranked as having the strongest effect in the Socioeconomic major factor by the non-Native students (23.0). However, Natives regarded the "social class" subfactor as having the strongest effect (19.0). Natives subscribed more to the "Chance" subfactor included in the Situational major factor (10.2) while non-Natives believe the "course of least resistance" subfactor as having the strongest effect (6.8). Both groups of students subscribe to the "Fear of failure" subfactor as having the strongest effect of those comprising the Psychosocial-emotional major factor with 22.6% of the Natives responding in this fashion compared to 20.3% of non-Natives.

Native and non-Native students agreed on three of the top four "no effect" subfactors. The four highest "no effect" subfactors for Native students were sex

discrimination (55.5), racial discrimination (46.7), fear of success (44.5) and peer groups (37.0). The four subfactors ranked as having the highest "no effect" rating for the non-Native students were race discrimination (70.3), sex discrimination (55.5), fear of success (44.5) and lack of confidence (38.5).

The combining of the percentages of strong and moderate effects for the total Native population resulted in the following rank order of the 6 CFC major factors: Individual (86%), Familial (54%), Societal (52%), Psychosocial-emotional (39%), Socioeconomic (38%) and Situational (34%) (Table 20). When strong and moderate effects were combined for the total non-Native population, the 6 CFC major factors were ranked in the following order: Individual (88%), Societal (51%), Familial (51%), Psychosocial-emotional (31%), Socioeconomic (29%) and Situational (29%).

Fifty-four percent of the Native students rated the Psychosocial-emotional major factor as having no or weak effect on their career decision making followed by the Socioeconomic major factor (52%). Non-Native students ranked these major factors in reverse order with 64% indicating the Psychosocial-emotional factor and 62% indicating the Socioeconomic major factor as having no or weak effect on their career decision making. The remaining 4 major factors were ranked by both Native and non-Native students in the following descending order of no or weak effect on their career decision making; Situational, Societal, Familial and Individual.

The combining of the percentages of strong and moderate effect of the subfactors for the total Native and non-Native samples yields some interesting comparisons (Table 20).

More than three times as many Native students (29.2%) compared to Non-native students (9.5%) emphasized the strong or moderate effect of subfactor "racial discrimination" on the career choice process.

While only a small number of students rated the Socioeconomic subfactor "sexual discrimination" as playing a strong or moderately important role on career decision making more than twice as many Native students (15.3%) compared to non-Native students (6.8%) believe this factor influences career choice.

The Psychosocial-emotional subfactor "lack of assertiveness" was rated by 40.1% of the Native students as having a strong or moderate effect on career choice compared to 29.0% of the non-Native high school students. Another Psychosocial-emotional subfactor "lack of confidence" was regarded as having a strong or moderate effect by 38.7% of the Native students compared to 27.1% of the non-Native students. A greater percentage of Native students (42.3) compared to non-Native students (30.4) were of the opinion that the career decision making process is moderately or strongly influenced by the subfactor "role conflict".

Table 20

Cumulative Percents of the Six General Factors and Subfactors on the CFC with "Strong Effect" and "Moderate Effect" Combined and "Weak Effect" and "No Effect" Combined for the Total Native and Non-Native Sample

Category	Strong Effect Moderate Effect Native	Non-Native	Weak Effect No Effect Native	Non-Native
		Factor 1		
Familial	59.2	60.1	33.6	35.1
Childhood Exp.	48.9	54.7	44.5	39.8
Mother's Role Model	59.9	41.2	35.0	54.7
Father's Role Model	47.4	46.6	38.7	47.3
TOTAL	53.85	50.65	37.95	44.23
		Factor 2		
Societal	55.5	62.2	39.4	34.4
Educ. Exp.	81.0	78.3	17.5	20.3
Peer Grp. Influence	35.1	29.1	71.3	69.6
Mass Media	35.1	33.8	59.9	64.1
TOTAL	51.68	50.85	47.03	47.1
		Factor 3		
Individual	89.0	93.3	7.3	5.4
Self-Expect.	86.9	91.2	8.8	8.8
Abilities	92.7	89.2	3.6	8.1
Interests	82.5	85.9	13.8	13.5
Need to Achieve	89.1	91.9	6.6	7.5
Attitudes	78.1	79.0	19.7	17.6
TOTAL	86.38	88.42	9.97	10.5

Table 20

Cumulative Percents of the Six General Factors and Subfactors on the CFC with "Strong Effect" and "Moderate Effect" Combined and "Weak Effect" and "No Effect" Combined for the Total Native and Non-Native Sample (Continued)

Category	Strong Effect Moderate Effect		Weak Effect No Effect	
	Native	Non-Native	Native	Non-Native
		Factor 4		
Socioeconomic	46.7	25.7	46.0	66.3
Social Class	49.7	41.2	47.5	53.4
Race Discrim.	29.2	9.5	42.8	82.5
Sex Discrim.	15.3	6.8	79.6	84.4
Supp & Demand	49.6	60.2	42.3	34.4
TOTAL	38.10	28.68	51.64	64.2
		Factor 5		
Situational	30.7	31.7	48.9	47.9
Chance	36.5	29.1	47.5	56.1
Least Resist.	33.6	25.0	49.6	63.5
TOTAL	33.6	28.6	48.67	55.83
		Factor 6		
Psychosocial-Emotional	41.4	35.8	46.7	56.1
Fear of Failure	44.5	47.3	51.8	48.6
Fear of Success	25.5	18.3	68.6	73.7
Lack of Assertiveness	40.1	29.0	49.7	60.8
Lack of Confidence	38.7	27.1	58.4	68.9
Role Conflict	42.3	30.4	48.9	64.2
TOTAL	38.75	31.32	54.02	62.05

Result Comparisons - O'Neil et al., Duncan and Present Study

A difference in the rank order of the strength of the 6 major CFC factors was obtained when comparing grand mean scores from two previous studies with those obtained from this research.

Table 21 compares O'Neil's et al. (1980b) grand mean scores (N=1436) and those of Duncan (1986) (N=240) to the scores obtained for the Native sample (N=137) in the present study.

Table 21

Grand Mean Scores of O'Neil et al. (N=1436), Duncan (N=240) and the Present Native Sample (N=137) on the Strength of the Six Major Factors on the CFC

Category	O'Neil Total Means	Rank	Duncan Total Means	Rank	Native Total Means	Rank
Familial	12.68	(2)	3.58	(2)	3.18	(2)
Societal	12.43	(3)	3.25	(4)	3.11	(3)
Individual	25.52	(1)	4.37	(1)	4.28	(1)
Socioeconomic	9.96	(5)	3.43	(3)	2.66	(6)
Situational	7.80	(6)	2.87	(5)	2.72	(5)
Psychosoc-emot.	10.86	(4)	2.86	(6)	2.73	(4)

O'Neil's primarily white sample ranked the six major factors in the following order from greater to lesser importance; Individual, Familial, Societal, Psychosocial-emotional, Socioeconomic and Situational. Duncan's black sample rated Individual, Familial, Socioeconomic, Societal,

Situational, and Psychosocial emotional factors in the order of greater to lesser importance.

The present study of Native urban high school students rated Individual, Familial, Societal, Psychosocial-emotional, Situational and Socioeconomic factors in the order of greater to lesser importance.

Table 22 provides further comparisons between the present study and those of O'Neil et al. (1980b), of a predominantly white population, and Duncan's (1986) study comprised of a total black population. Percentage comparisons of the combined strong and moderate effect categories indicate similar scores to those obtained from O'Neil's study for both Native and non-Native students with two exceptions. Firstly, more of the Native students rated the Psychosocial-emotional and Situational major factors as having more influence on their career decision making than O'Neil's population. Secondly, more of the non-Native population was also of the opinion that the Psychosocial-emotional factor was more important than did O'Neil's population.

Table 22 shows that with only one exception a larger percentage of Duncan's (1986) black sample were of the opinion that each of the 6 CFC major factors had a strong or moderate effect than did the percentages of respondents from either O'Neil et al.'s (1980b) or the present samples. The only exception pertained to the Societal factor where a slightly higher precentage of Native students were of the

opinion that this major factor had a stronger or more moderate influence than either O'Neil or Duncan's samples.

One of the most significant findings in the comparison of CFC opinion obtained from the Native and non-Native Edmonton students and the white and black American samples pertains to the Socioeconomic major factor.

Over 60% of Duncan's black college sample underscored the strong or moderate influences of social class, racial and sexual discrimination and the availability of jobs on career decisions. This figure compares to less than 40% for the Native and non-Native Canadian sample and only 21% for O'Neil's (1980b) sample.

Table 22

Comparisons of the 6 CFC Factors Between O'Neil et al. (1980)(N=1436), Duncan (1986)(N-240), the Present Native (N=137) and present Non-Native (N=148) Populations on the Combined "Strong Effect" and "Moderate Effect" Scales

CFC Major Factors	O'Neil's et al. Percentages	Duncan's Percentages	Present Native Percentages	Present Non-Native Percentages
Familial	.50	.67	.54	.51
Societal	.47	.51	.52	.51
Individual	.84	.89	.86	.88
Socioeconomic	.35	.61	.38	.29
Situational	.25	.41	.34	.29
Psychosocial-Emotional	.21	.46	.39	.31

Summary of Findings

1. Non-significant differences were found between opinions of Native and non-Native high school students on Native and Anglo cultural value statements obtained from the CVI.
2. Non-significant differences were found between opinions of Native and non-Native students on 6 major factors influencing career decision making.
3. Non-significant differences were found between opinions of Native male students and non-Native male students on 6 major factors influencing career decision making.
4. Non-significant differences were found between opinions of Native and non-Native female students on 6 major factors influencing career decision making.
5. Non-significant differences were found between opinions of Native students who have lived on a reserve, Metis colony/settlement or both and Native students who did not have this experience on 6 major factors influencing career decision making.
6. Non-significant differences were found between opinions of Indian and Metis students on 6 factors influencing career decision making.
7. While no statistically significant differences were obtained between the opinion of Native and non-Native students on the importance of the 6 major CFC factors

influencing career decision making, results indicate trends regarding the influence of some subfactors.

A higher percentage of Native students view two Socioeconomic subfactors "racial discrimination" and "sexual discrimination" and three Psychosocial-emotional subfactors "lack of assertiveness", "lack of confidence" and "role conflict" as having more of a strong or moderate effect on career decision making than do their non-Native peers.

CHAPTER V

DISCUSSION

Limitations and Delimitations of the Investigation

Limitations

The following limitations must be considered in the interpretation and discussions of the findings from this study.

(1) The instruments administered to the respondents to obtain opinions are self-rating scales. It is possible that certain items on the questionnaires may not be responded to in a truthful manner.

(2) It was assumed by O'Neill and Bush (1978) and O'Neil et al. (1978) that the CFC general and subfactors which compose the 6 major factors is a comprehensive list of influencing factors on career decision-making.

(3) It was assumed that Richardson's Native and Anglo cultural value statements which were incorporated into the Culture Value Inventory represent a comprehensive and accurate list of reflections of Native and Anglo values.

(4) It was assumed that the changes implemented by the investigator to Richardson's 37 sets of value statements does not alter the meanings of those statements intended by Richardson.

(5) The Native sample was not randomly selected which may indicate that this sample is not representative of the total population of Edmonton Native High school students. Every effort was made however to request the participation of Edmonton high school students identified as Native.

(6) The majority of the Native and non-Native students attended one high school in Edmonton which may indicate that the subjects are not representative of the total Edmonton high school population. Although the evidence exists that the majority of Edmonton Native high school students attend St. Joseph's Composite, the investigator was unable to determine if this assumption was accurate in that formal reporting of Native students is not available from Edmonton Public Schools.

(7) The lack of formal records of Native students attending high school in the Edmonton Public School System severely limited accessibility to these students. The Native subjects in the study may therefore not be representative of the total population of Native students attending Edmonton Public Schools.

(8) The CFC and the CVI were randomly presented in the questionnaire packages while the Background Information Questionnaire was administered to all students as the first questionnaire to be completed. The inclusion of three questions regarding Native status and residency on the Native Background Information Questionanire may

have resulted in response bias by some of the Native respondents.

9. One issue that required serious consideration in conducting this investigation pertained to the format utilized in obtaining student opinion. While Tuckman (1978) believes there are more benefits and enhanced reliability that accrue from the questionnaire approach used in this study compared to oral interview techniques, certain limitations are evident to both approaches. The addition of a series of oral interviews with even a few Native and non-Native students would have added to this study by providing clarity and expanded awareness regarding opinions on values, career factors, living experiences, socioeconomic status and the perceived importance of this study.

Delimitations

(1) This study is delimited to Native and non-Native high school students at seven Edmonton Separate (Catholic) schools and three Edmonton Public schools during the 1989/90 school year.

(2) The sample population is delimited to Edmonton, Alberta, Canada. Results of this study may not be generalized to other regions of Canada.

Conclusions

This investigation endeavoured to determine, by means of a questionnaire-survey method, the opinions of Native and non-Native high school students in the Edmonton Separate and Edmonton Public School Systems, regarding questions pertaining to cultural values and career decisions. The primary purpose of the present study was designed to enhance the understanding of factors that impact on the career decision making of Native and non-Native Edmonton high school students.

Native and non-Native students illustrated general agreement in their opinions of cultural values and on facets of career decision making. Native and non-Native males reported general agreement on factors influencing their career decision making. Native and non-Native females also reported similar opinions of factors playing a role in career choice. Native students of differing cultural residency experience and of differing Native status also reported agreement in their opinions of factors, influencing their career decision-making.

This study showed through statistical analysis of the opinions reported a number of findings supporting all 6 of the hypotheses put forth.

The Cultural Value Inventory (CVI) was developed and administered to all respondents to help measure the degree of cultural distinction evident between urban Native and

urban non-Native students. The results of the responses attempted to distinguish between one aspect of Native and non-Native culture - values - an important distinguishing characteristic of culture emphasized in the literature (Bryde, 1971; Kluckhohn and Strodtbeck, 1961; Richardson, 1981).

With respect to Hypothesis I, (Culture of student and Opinion on Value Statement), the study showed no significant differences of opinion between Native and non-Native students. Both groups illustrated similar opinions on how they rated Native and Anglo value statements. The total scores obtained on how they rated the 37 sets of value statements indicates no overall cultural distinction between these two groups of high school students. Consequently, Hypothesis I is supported.

Thousands of years of history provide ample evidence of Native cultural uniqueness. Opinions obtained from students on the CVI indicate a lack of significant cultural distinction between Native and non-Native students. These results may be a result of the acculturation process, cultural assimilation, it may simply mean that the measuring instrument used was not sufficiently sensitive to fine cultural differences or that Native youth were never taught the cultural traditions in the first place.

The modified Career Factor Checklist (CFC) was administered to all students to measure the influence of 6

major factors determined by O'Neil et al. (1978) to influence career decision making.

Hypothesis II (Culture of Student and Opinions Regarding Six Major Factors Affecting Career Decision Making) was supported. No significant differences were reported between Native and non-Native students on their opinion of the 6 major factors influencing career decision making as outlined on the Career Factor Checklist, therefore Hypothesis II is supported.

Results obtained from the descriptive statistics indicate that over 50% of the Native and non-Native students reported that the Individual, Familial and Societal major factors had strong or moderate effects on their career decisions. Both groups of students clearly endorse the influences of the Individual major factor with 86% of the Native students and 88% of the non-Native students indicating a strong or moderate effect.

Although no overall significant differences in opinion were apparent Native student responses rated 2 major factors of more importance than did their non-Native peers. 39% of the Native students were of the opinion that the Psychosocial-emotional major factor was of strong or moderate importance compared to 31% of the non-Native sample. The Psychosocial-emotional factors (fear of failure, fear of success, lack of confidence, lack of assertiveness and role conflict) have been defined by O'Neil and Bush, 1987 as problem areas that can potentially

influence, restrict or limit personal and career development.

The Socioeconomic major factor was similarly supported to a greater extent by Native students (38%) than non-Native students (29%). This major factor incorporates social class, racial discrimination, sex discrimation and the availability of jobs.

These results are supported in the literature by Crites (1969), Sue (1981) and Axelson (1985) who emphasize that many minority group members perceive or experience more discrimination. In addition, they believe that minority group members may be more cognizant of the inhibiting influences of socioeconomic factors to their success. While less than 50% of the Native students view these factors as influencing career decision making they seem to be more aware that poverty, social class and various types of discrimination may inhibit their career decision making by providing barriers to goal attainment.

Hypothesis III (Culture of Male Students and Opinions Regarding Six Major Factors Affecting Career Decision Making) is also supported. No significant differences were obtained between Native males and non-Native males on their opinion of the importance of the 6 major CFC factors. Descriptive data indicate the Individual, Familial and Societal major factors were rated by both groups as most important The Socioeconomic major factor was considered least important by non-Native males, while Native males

regarded the Psychosocial-emotional factor least influential.

These results contradict locus of control studies that show that ethnic minorities (Sue, 1981) and Natives in particular (Tyler and Holsinger, 1975) score higher on the external locus of control continuum than those from the general population. Both Native and non-Native males, reflected in their ranking of the Individual major factor, indicate they have control over their career decision making and those decisions will be determined more by individual initiative than by luck or chance.

In addition these results show that while Native family influences, emphasized by Bryde (1971) and others, are very important, non-Native students regarded family influences of equal importance.

Support was also obtained for Hypothesis IV, (Culture of Female Students and Opinions Regarding Six Major Factors Affecting Career Decision-Making). Similar to their male peers, Native females and non-Native females have the same opinion of the importance to their career decision-making of the 6 major factors outlined on the CFC. Descriptive data show that both groups of females rate Individual, Familial and Societal most important. It is interesting to note that Native females regard Psychosocial-emotional factors more important than Socioeconomic and Situational. Non-Native females perceive the Situational major factor as more important than the remaining 2 factors.

With respect to Hypothesis V (Native Residency and Opinions Regarding Six Major Factors Affecting Career Decision-Making), no significant differences were obtained. Hypothesis V is therefore supported. Native students who had lived on a reserve, Metis colony/settlement or both, showed no significant differences in opinion on the influence of the 6 CFC major factors to those Native students who did not experience this unique cultural phenomenon.

It is suggested from the literature (Bryde, 1971; Kluckhohn and Strodtbeck, 1961 and Trimble, 1989) that living in a predominantly Native community is a unique cultural experience. These experiences however were not significantly reflected by how the two groups of Native students in this study viewed factors influencing career decision making.

Hypothesis VI was also supported (Native Status and Opinions Regarding Six Major Factors Affecting Career Decision-Making). No significant differences of opinion were evident between Treaty Indian and Metis students with respect to the importance of the 6 major factors on the CFC.

These results confirm that status does not significantly influence Native high school students on their opinions of factors influencing career decision making.

The results from this study lead to the conclusion that Edmonton Native and non-Native high school students have similar opinions on most facets of questions posed to them

relating to cultural values and career decision making. They do hold similar opinions on cultural values. They agree on most factors and subfactors that influence their career decisions. Both groups underscore the very high importance placed on personality correlates in making career decisions, exemplified by their overwhelming support of the Individual major factor on the CFC. Approximately 50% of both groups of students agree on the importance of the Familial and Societal influences on career decision making. Almost 80% of both groups agree on the importance of educational experiences for those making career decisions.

The Native and non-Native students both deemphasise the impact of external, environmental factors on career decision making. Less than 40% of the students indicated that the Socioeconomic, Situational and Psychosocial-emotional major factors had a strong or moderate effect on their career decision making. Both groups of students have similar opinions on 3 of the 4 no effect CFC subfactors selected - racial discrimination, sexual discrimination and fear of failure.

The Native and non-Native students show no significant group X gender, group X SES, group X grade and group X how long they lived in Edmonton differences in how they respond to the CFC. MANOVA results specifically reflecting the impact of socioeconomic status on opinions expressed are interesting considering the Native sample was significantly more represented in lower SES levels. The results did not

reflect significant differences between the opinions expressed by Native and non-Native students of differing SES levels on the 6 CFC factors. Lipsett (1962) suggests that social class membership influences the particular choices of a career an adolescent makes and Caplow (1954) believes social class membership restricts occupational choices. The Native and non-Native students in this study, representing diverse SES backgrounds do not disagree however on factors that influence their career decision making. Indeed both samples view SES factors as not a very dominating force in their career decision making process. The findings of this study are consistent with those career developmental theorists who espouse that multiple factors affect career decisions (Super, 1957; Crites, 1969; Osipow, 1973).

The range of responses on the importance of the 6 general factors and the 22 subfactors was large. However, a combination of some or all of these factors and subfactors were shown to play a role in the individual career decision making process of Native and non-Native students. Individual factors such as self-expectancies, abilities, interests, need to achieve and attitude were shown to have the strongest influence. The influence of childhood experiences and mother and father role models was also very evident. In addition, students viewed societal factors such as educational experiences, peer group influences and the mass media as impacting on their career decision making. Students were also of the opinion that various socioeconomic

factors as well as psychosocial-emotional factors such as fear of failure, lack of confidence and others could influence their career aspirations. While fewer students voiced the opinion that situational factors influence career decision making there were students that indicated chance and the course of least resistance would play a role in this process.

The results also indicate that the Native cultural background of students does not influence the opinions of factors impacting on career choice in a significantly different way to those of non-Native students. In addition, Native students with cultural backgrounds or experiences resulting from their status or residency on a reserve or settlement did not express significantly different opinions to those of differing Native cultural backgrounds or experiences.

There is some evidence that 2 major factors on the CFC play more important roles to Native high school career decisions makers - Psychosocial-emotional and Socioeconomic. Native females especially ranked the Pscyhosocial-emotional major factor, which encompasses personal perceived barriers to career attainment, as more important than did their non-Native peers.

In addition a higher percentage of the total Native sample emphasised the importance of three Psychosocial-emotional subfactors on the career decision making process, "lack of assertiveness", "lack of confidence" and "role

conflict". These subfactors were defined by O'Neil and Bush (1978) as barriers to the career development of adult women. The results indicate that these subfactors are also considered barriers to the career decision making of minority cultural group members. This conclusion adds support to the views of Atkinson (1983), Sue (1981) and others who regard women and minority cultural group members as having many similar characteristics as well as similar treatment by society.

There is further evidence from the results that the Native students are more aware of the influence of Socioeconomic factors such as racial discrimination, sexual discrimination, social class and availability of jobs. The majority of the Native students however do not view these factors as major influences to career decision making directly but in indirect ways it has been reported that these influences play a part.

These results support the views of Atkinson (1983), Sue (1981) and others who are of the opinion that some minority group members believe they are singled out for differential and unequal treatment and regard themselves as objects of discrimination.

Relating the present study results to those obtained by O'Neil et al. (1980b) and Duncan (1986) provides some interesting comparisons. In all three studies, students emphasize the importance of the Individual major factor in

career decision making. External factors are considered less influential in all three studies. Duncan's black population did report that socioeconomic factors, which involve racial and sexual discrimination, social class and supply and demand of jobs, are the third most important factor influencing career decisions. The ratings for the socioeconomic major factor in the other two studies are very different. O'Neil's predominantly white mid-western U.S. college population ranked this factor 5th overall and the Native students in the present study ranked this factor 6th or of least importance.

These comparisons indicate the black college sample may have experienced more economic hardship or discriminatory practices than those students in O'Neil's (1980b) or the present sample.

The incorporation of the Career Factor Checklist into the present study and the results obtained enhance the reliability and validity of this instrument. The study demonstrates the applicability of the CFC to an international sample of students as well as a sample of Native people and provides further evidence regarding the various factors that influence career decisions.

The statistical analysis of the impact of certain background variables on the opinions expressed by the students of factors influencing career decision making yield two significant results. The grade placement and program students are registered in at high school may be influencing factors on how students view career decision making. The

literature supports the finding that differences of opinion regarding factors influencing career decision making may be related to grade placement (O'Neil et al., 1980b).

While differences of opinion on the 6 CFC factors may be attributed to grade placement, Super (1957), Herr & Cramer (1984) and others emphasize that career development is an age related process. Consequently, the age of the students may have been more of an influencing factor on the opinions expressed than specific grade placement.

Why students registered in different programs view factors influencing career decision making differently warrants additional research. Perhaps the study of student ability and aptitude levels on career decision making may provide some answers.

Students enrolled in high school programs may possess similar characteristics such as ability and aptitude level, career maturity and possibly age, all factors shown to influence career decision making (Crites, 1969; Herr & Cramer, 1984; Osipow, 1983). Perhaps all or some of these characteristics have contributed to the resulting diffences in opinion to the 6 CFC factors by students in different programs.

Inferences, Implications and Recommendations

There are a number of inferences and implications derived from this study that may play a significant role in assisting Native and non-Native high school students in

their career development. These inferences and implications arising from the opinions of grade ten, eleven and twelve students have resulted in a number of recommendations that will be discussed in this section.

(1) The results of the study underscore the need for continued and improved career education programming including career counselling, for both Native and non-Native high school students. It is evident that high school students require continued assistance and information to help them understand the realities and intricacies incorporated in the world of work as well as the multiplicity of factors that assist or stymie career development.

(2) From the opinion obtained on the Career Factor Checklist, the instrument could be considered a valuable tool for counsellors in obtaining information about factors influencing students' career decision making. It is recommended that the CFC be administered to individual students in career counselling to determine what factors they believe will enhance or thwart their career choices. If, as Super (1957) and Holland (1973) suggest, career choice is an implementation of self-concept and personality plays a significant role, then the CFC will provide valuable information on how students perceive themselves in this process.

(3) From the opinions expressed on the CFC, students imply the Individual major factor is the most important influence

in their career decision. It is recommended that counsellors be encouraged to address the impact of individual personal attributes on career decision making with all high school students.

(4) From the student opinions obtained in this study, it may be inferred that external or environmental factors do not play a significant role in career decision making. It is recommended that school systems, teachers and counsellors implement strategies to educate their high school students on the importance these factors play in influencing career decision making.

(5) Native students, especially female students, expressed the opinion that the Psychosocial-emotional factors and Socioeconomic factors are important in their career decision making. It is recommended that counsellors become more cognizant of the impact of various perceived and real barriers to career choice such as the impact of racial and sexual discrimination, social class, the availability of jobs, lack of confidence, lack of assertiveness and role conflict. Upgrading through professional training courses in areas of career awareness, career exploration, career decision making and career preparation is encouraged. In addition courses in understanding and counselling minority member clients are suggested.

(6) While no overall significant differences were obtained between Native and non-Native students on the importance of the 6 CFC major factors, Native students did voice their

opinion that a number of subfactors played a more important role in their career decision making process than did their non-Native peers. Some of these subfactors include racial and sexual discrimination, lack of assertiveness, lack of confidence and role conflict. It is recommended that these factors be addressed by governments, school jurisdictions, counsellors, teachers, Native organizations and parents. These factors should be addressed in school through group guidance, individual and group counselling, and the CALM 20 course.

(7) Those preparing and teaching counsellor education programs, career education programs and developing new career materials should benefit from the results of this study. Native and non-Native students emphasise and deemphasise many and different influences on career decision making. Those preparing people, programs and materials to assist those on the career developmental continuum must be fully aware of the importance of the many career developmental and decision making theories, the role of internal and external factors, and the impact of many other variables, such as minority status, grade level and program. Counsellor education programs must incorporate the theory and practice associated with cross cultural counselling. The involvement of Native elders and other minority leaders in sharing their wisdom and expertise to counsellors is also suggested.

(8) From the opinions expressed on the CFC, it is clear that students enrolled in different grade levels and educational programs view career decision making differently. It is recommended that high school personnel implementing career education programs and offering counselling understand the implications of this conclusion and provide different career education approaches, materials and guidance to students at different grade levels.

(9) From the strong opinion expressed by students regarding the role educational experiences play in career decision making, it is inferred that schools should continue to develop and expand appropriate career education programs to help students in career development.

(10) The high underemployment of Native people in many occupational areas warrants the need for improved and expanded career education programs for the Native student and Native adult population in general. Governments, schools jurisdictions, employment agencies, business, industry, labour and Native organizations should benefit from the results of this study and are encouraged to assist in broadening career horizons.

(11) The importance of role models in affecting attitude change was shown by Greene and her associates (1982). In addition Native role modeling to assist in career development was addressed by Krebs et al. (1988). The infusion of Native role models in the print and electronic media is highly recommended. Schools are encouraged to

gather names of Native people who could visit and discuss their careers. Work experience programs should be expanded and offered to more students.

(12) The few Native people and women in the many apprenticeship occupations suggests that the Alberta Apprenticeship Board should develop new initiatives and materials to encourage improved Native and female participation.

(13) Results from this study may provide an impetus to Native parents and educational systems to endorse present Native cultural programs in the community and in schools and perhaps introduce new programs. Counsellors may find the CVI a valuable tool in determining the degree of enculturation of Native clients. It is implied from the results of this study that Native urban high school students may not believe, understand or have much consideration for traditional Native value statements. It is recommended that programs such as the Ben Calf Robe program in the ESSB, the Sacred Circle program in the EPSB, cultural workshops and the use of Native counsellors be expanded to improve urban Native students cultural awareness.

(14) Counsellors should consider the administration of the CVI to Native clients to help in determining their degree of cultural awareness which could then be reflected in appropriate cross cultural counselling approaches.

(15) The investigator experienced a great degree of difficulty in identifying Native students for this research. From a total of approximately 101,000 students enrolled in

the 2 school systems only about 400 high school students could be identified as Native. If new career, cultural or other programs are to be implemented, and if new research is to occur, it is recommended that new strategies for identification of the Native student population in schools be devised and implemented.

All school students and their parents or guardians should be encouraged and provided with the opportunity to disclose voluntarily their Native status on annual school registration forms. This approach has been successfully introduced by the Edmonton Separate School Board. It is only through such strategies that school jurisdictions can accurately determine specific needs of their Native population that may require addressing. Native hiring practices, Native education programming and Native career educational initiatives could all be influenced with accurate demographic reporting procedures. Notices of Native career opportunities, scholarships, awards and specific career information could be specifically directed to appropriate students.

Suggestions for Further Research

Additional research relating to the many factors that impinge on the career decision making of Native and non-Native students is required. The present study simply scratched the surface of a vast array of research that should be undertaken in order to better comprehend the process of career development in Native and non-Native Canadians.

Pursuant to this study, more comprehensive research should be considered in a number of areas:

(1) A suggestion for an immediate next step in research would see the administration of the CFC and the CVI to a variety of other random samples of individuals throughout Alberta and other parts of Canada to compare results. These samples might include: (a) another sample of Native and non-Native students to determine the generalizability of the results of the present study, (b) a rural population of Native and non-Native high school students, (c) Native and non-Native high school dropouts, (d) a sample of chronically unemployed Native and non-Native adults and, (e) members of other minority groups.

(2) Research utilizing the original Native value statements developed by Richardson (1981) administered to another Native sample of urban high school students may yield different results.

(3) The CVI may be a valuable tool if used in conjunction with other research instruments endeavouring to determine

cultural factors unique to the Native population such as the FAB Scale developed by Nyberg and Clarke (1988).

(4) In that a number of Native and non-Native students expressed the opinion that certain psychosocial-emotional and socioeconomic subfactors were of strong or moderate importance in their career decision making process further research is needed to investigate how these subfactors influence those entering the work force and how these barriers may be overcome.

(5) Students registered in different high school programs expressed significantly different views regarding factors that influence career choice. Why students from different programs view the career decision making process differently needs further investigation.

(6) Native students were of similar opinions regarding factors that influence career choice even though they may have lived on a reserve or Metis settlement. Length of residence was not considered in this study. Further research is suggested to determine if length of residency impacts on the values and career choice process of Native students.

(7) Considering the high ranking placed by Native and non-Native students on the role of family in their career development, more research is required into how parents can play a more signficant and benefical role in the career choice selection process of their children.

(8) Considering the number of school dropouts and the negative impact leaving school early has on most youth,

reserach is suggested into the possible link between high school dropout, values and factors influencing career choice.

(9) The datedness of the socioeconomic scale used in this study coupled with changes in household structure, occupational categories and societal views towards work warrants research to develop new measures of socioeconomic factors in Canada.

(10) Bandura's (1977) self-efficacy theories regarding behavior change warrants research to determine applicability to career development especially in understanding the individual career decision making process.

Concluding Comments

The investigator has gained new insight into what he considers to be a fascinating and exciting area - career decision making in Native and non-Native high school students. It is hoped that this study will assist high school students who are involved in career planning now or will be in the not too distant future. The investigator is optimistic that those assisting Native and non-Native youth will benefit from this research. The results are clear that a myriad of internal and external factors impinge on the career decision making process. While these factors have been shown to impact on Native and non-Native high school students in similar ways, there are various individual and group differences that warrant further scrutiny. It is the

final hope of this investigator that as a direct or indirect result of this study, Native and non-Native students will perceive new career vistas, will set new career horizons and will ultimately see their dreams come to fruition.

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Appendix A

Cultural Value Inventory

CULTURAL VALUE INVENTORY

DIRECTIONS:

Below are listed 37 pairs of Value Statements. A Value is a belief or an idea that is important to you as a person. Values may assist you or guide you to act or live your life in a certain way.

Read each pair of statements numbered the same on the left and right hand side of the paper. You are to choose ONLY ONE STATEMENT FROM EACH PAIR which is most important to you by CIRCLING ONLY ONE NUMBER from 1 to 6 located between the paired statements.

Circle 1 if the statement on the left is most important to you.
Circle 2 if the statement on the left is very important to you.
Circle 3 if the statement on the left is somewhat important to you.

Circle 4 if the statement on the right is somewhat important to you.
Circle 5 if the statement on the right is very important to you.
Circle 6 if the statement on the right is most important to you.

REMEMBER - CIRCLE ONLY ONE NUMBER
Between 1 and 6 for Each Pair of Statements

1.	Happiness - this is most important! Be able to laugh at misery; life is to be enjoyed.	*1*	*2*	*3*	*4*	*5*	*6*	1.	Success - generally involving status, security, wealth and proficiency.
2.	Ownership - indicating preference to own an outhouse rather than share a mansion. It's OK to get as much as you can for yourself.	*1*	*2*	*3*	*4*	*5*	*6*	2.	Sharing - everything belongs to others, just as the Earth belongs to all people.
3.	Get ahead for the group.	*1*	*2*	*3*	*4*	*5*	*6*	3.	Get ahead for one's self.
4.	Humble - be modest, don't overrate your qualities or achievements.	*1*	*2*	*3*	*4*	*5*	*6*	4.	Competitive - believing "If you don't toot your own horn then who will?"
5.	The future lies with the youth.	*1*	*2*	*3*	*4*	*5*	*6*	5.	Honor your elders - they have wisdom.
6.	Learning is found in school; get all the schooling that you possibly can because it can't be taken away from you.	*1*	*2*	*3*	*4*	*5*	*6*	6.	Learning through legends; remembering the great stories of the past, that's where the knowledge comes from.
7.	Look to the future to things new - "Tie Your Wagon to a Star and Keep Climbing Up and Up."	*1*	*2*	*3*	*4*	*5*	*6*	7.	Look backward to traditional ways - the old ways are the best ways; they have been proven.
8.	Work for a purpose - once you have enough then quit and enjoy life, even if just for a day.	*1*	*2*	*3*	*4*	*5*	*6*	8.	Work for a retirement. Plan your future and stick to a job, even if you don't like it.

Go to next page ...

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Circle 1 if the statement on the left is most important to you.
Circle 2 if the statement on the left is very important to you.
Circle 3 if the statement on the left is somewhat important to you.

Circle 4 if the statement on the right is somewhat important to you.
Circle 5 if the statement on the right is very important to you.
Circle 6 if the statement on the right is most important to you.

REMEMBER - CIRCLE ONLY ONE NUMBER
Between 1 and 6 for Each Pair of Statements

9.	Be carefree. Time is no big deal. Work long hours if happy. Don't worry over time; "I'll get there eventually."	1	2	3	4 5 6	9.	Be structured - be most aware of time. "Don't put off until tomorrow what you have to do today."
10.	"What you see is what you get." Say what's on your mind; you don't have to hold back for anyone.	1	2	3	4 5 6	10.	Discrete - know when to be silent. Be cautious with your words. Be low-key.
11.	Religion/spirituality is individualistic.	1	2	3	4 5 6	11.	Religion/spirituality is the universe; it relates to all things and all people.
12.	Focus yourself to the land.	1	2	3	4 5 6	12.	Focus yourself to a house, a job.
13.	Look people in the eye - don't be afraid to establish eye contact. It's more honest.	1	2	3	4 5 6	13.	Be a good listener. It is better if you use your ears and listen well.
14.	Don't be a "boat rocker."	1	2	3	4 5 6	14.	Be as free as the wind.
15.	Don't live in the past - look ahead. Live in the here-and-now.	1	2	3	4 5 6	15.	Cherish your memory - remember the days of your youth. The past is important.
16.	Live with your hands - physical activity is sacred.	1	2	3	4 5 6	16.	Live with your mind - think intelligently. Show the teacher how well you know the answers to questions he/she might ask of you. Good at books.
17.	Don't criticize your people.	1	2	3	4 5 6	17.	It's OK to judge your fellow man.
18.	Don't show pain.	1	2	3	4 5 6	18.	It's OK to show your pain through your crying and tears.
19.	You're in Canada, speak English or French.	1	2	3	4 5 6	19.	Cherish your own language and speak it when possible.
20.	"What are you - some kind of an animal? A pig or jackass?"	1	2	3	4 5 6	20.	Live in harmony with the animals; animals are your brothers and sisters.

Go to next page ...

Circle 1 if the statement on the left is most important to you.
Circle 2 if the statement on the left is very important to you.
Circle 3 if the statement on the left is somewhat important to you.

Circle 4 if the statement on the right is somewhat important to you.
Circle 5 if the statement on the right is very important to you.
Circle 6 if the statement on the right is most important to you.

REMEMBER - CIRCLE ONLY ONE NUMBER
Between 1 and 6 for Each Pair of Statements

21.	Children are a gift of God to be shared with others.	*1 2 3 4 5 6*	21. I'll discipline my own children; don't you tell me how to raise mine!"
22.	Consider the relative nature of the crime, the personality of the individual, and the conditions.	*1 2 3 4 5 6*	22. The law is the law! "To steal a penny is as bad as to steal $10,000! Stealing is stealing! We can't make exceptions.
23.	"So who cares if you disturb nature!"	*1 2 3 4 5 6*	23. Leave things natural as they were meant to be.
24.	Dance is the expression of religion.	*1 2 3 4 5 6*	24. Dance is the expression of pleasure.
25.	Everything has a limit - there must be privacy. "Fence in your yard and keep them off the grass!"	*1 2 3 4 5 6*	25. There are no boundaries - God made it for all of us. "Why should I fence in a yard?"
26.	Have a rule for everything. Write your ideas in detail.	*1 2 3 4 5 6*	26. Few rules are best. The rules should be loosely written and flexible.
27.	Intuitiveness; use your own insight. A gut feeling.	*1 2 3 4 5 6*	27. Empiricism. Don't trust your instincts - be scientific.
28.	Scientific.	*1 2 3 4 5 6*	28. Mystical.
29.	Be simple - eat things simply prepared and natural.	*1 2 3 4 5 6*	29. Be sophisticated - eat gourmet well prepared and seasoned. Be a connoisseur of many things.
30.	Judge things for yourself.	*1 2 3 4 5 6*	30. Have instruments such as machines and computers judge for you.
31.	Modern medicines - "You can make anything in today's laboratories."	*1 2 3 4 5 6*	31. Medicine should be natural herbs, a gift of nature.
32.	The earth provides natural healing agents that require no purification.	*1 2 3 4 5 6*	32. Things must be sterile and clean, not dirty and unsanitary.

Go to next page ...

Circle 1 if the statement on the left is most important to you.
Circle 2 if the statement on the left is very important to you.
Circle 3 if the statement on the left is somewhat important to you.

Circle 4 if the statement on the right is somewhat important to you.
Circle 5 if the statement on the right is very important to you.
Circle 6 if the statement on the right is most important to you.

REMEMBER - CIRCLE ONLY ONE NUMBER
Between 1 and 6 for Each Pair of Statements

33.	Enjoy the fine detail and small things in life.	*1 2 3 4 5 6*	33.	The bigger the better.
34.	Travel light. Get along with as little as possible.	*1 2 3 4 5 6*	34.	Have everything at your disposal.
35.	Accept others - even if they have problems.	*1 2 3 4 5 6*	35.	You must try to change those with problems.
36.	Be cautious on how you spend your money.	*1 2 3 4 5 6*	36.	The price is of no concern.
37.	"Nothing in this world is simple!"	*1 2 3 4 5 6*	37.	Enjoy simplifying problems.

Appendix B

Career Factor Checklist (Modified)

CAREER FACTOR CHECKLIST

Instructions: Below are a number of factors that may affect your career decisions. Indicate the degree that you think each of the factors affects YOUR OWN CAREER DECISION MAKING using the following scale. Mark the unsure category (1) only if you are completely unaware or have never thought of how the factors affect your career decision making. Mark your answer on the space provided to the left of each question.

Degree of Effect on Your Career Decision Making

Strong Effect	Moderate Effect	Weak Effect	No Effect	Unsure of Effect
5	4	3	2	1

___1. **Familial Factors.** Your own family's values, attitudes and behaviors about what your career choice should be.

___2. **Childhood Experience.** Your early childhood experiences which have influenced your choice of careers.

___3. **Mother's Role Model.** Your mother's roles and attitudes related to family, career and work.

___4. **Father's Role Model.** Your father's roles and attitudes related to family, career and work.

___5. **Societal Factors.** The values, attitudes and practices in your education that may influence your career choices.

___6. **Educational Factors.** The values, attitudes and practices in your education that may influence your career choices.

___7. **Peer Group Influences.** The values, attitudes and behaviors of your peers (your age group - friends and acquaintances) that may influence your career choices.

___8. **Mass Media.** Values, attitudes and behaviors on radio, TV, movies, books and magazines regarding career choices.

___9. **Individual Factors.** Your abilities, interests, self expectancies, attitudes and need to achieve.

___10. **Self Expectancies.** What you expect of yourself related to possible careers now and in the future.

___11. **Abilities.** All skills you have or can develop.

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Degree of Effect on Your Career Decision Making

Strong Effect	Moderate Effect	Weak Effect	No Effect	Unsure of Effect
5	4	3	2	1

___12. **Interests.** Specific activities and areas that arouse your curiosity or attention.

___13. **Need to Achieve.** Your desire to accomplish certain goals in life.

___14. **Attitudes.** Your perceptions and feelings about yourself and your role related to careers.

___15. **Socio-economic Factors.** Your social, racial and ethnic group and society's economic condition.

___16. **Social Class.** The social and economic level of you and your family.

___17. **Race.** Your skin color or ethnic origins.

___18. **Sex Discrimination.** Your experience of personal and societal discrimination on the basis of sex.

___19. **Supply and Demand of Jobs.** Availability of jobs.

___20. **Situational Factors.** Unforeseen circumstances and events.

___21. **Chance.** Unplanned or unpredictable events.

___22. **Course of Least Resistance.** Available options offering the least resistance, hard work or difficulty.

___23. **Psychosocial-Emotional Barriers.** Emotional, social or personal problems that you have in your life.

___24. **Fear of Failure.** Fear of being seen or judged as inadequate or unsuccessful.

___25. **Fear of Success.** Avoiding success because of possible negative consequences.

___26. **Lack of Assertiveness.** Lack of initiative to express yourself and to act in your own best interest.

___27. **Lack of Confidence.** Lack of trust in your abilities and potential to be a success.

___28. **Role Conflict.** Feelings of frustration over being pulled in opposite directions by your roles (such as career vs. family, career vs. parents approval-disapproval).

Appendix C

Background Information Questionnaire

BACKGROUND INFORMATION OF STUDENTS

PLEASE READ THE FOLLOWING QUESTIONS AND CIRCLE THE NUMBER NEXT TO YOUR ANSWER OR FILL IN THE ANSWER SPACE.

1. Grade Presently Enrolled in?:

   Grade 10 1
   Grade 11 2
   Grade 12 3

2. Sex:

   Male 1
   Female 2

3. Age:

   Please write your age _____

4. Do you live in Edmonton?:

   Yes 1
   No 2

5. How long have you lived in Edmonton?:

   0 - 1 Year 1
   2 - 5 Years 2
   6 - 10 Years 3
   Over 10 Years 4

6. Where do you live if not in Edmonton?:

   Please write where you live _____

7. What program are you registered in at High School?:

   Academic/Advanced Diploma 1
   General Diploma 2
   Vocational/Technical 3
   Other 4
   (If other please state program) _____

PLEASE READ THE FOLLOWING QUESTIONS AND CIRCLE THE NUMBER NEXT TO YOUR ANSWER OR FILL IN THE ANSWER SPACE.

8. Write the name of your **Father's** occupation and describe some specific tasks he performs in his occupation.

Name of Father's occupation _____

Specific tasks or duties of his occupation

_____

_____

9. Write the name of your **Mother's** occupation and describe some specific tasks she performs in her occupation.

Name of Mother's occupation _____

Specific tasks or duties of her occupation

_____

_____

10. Native Status:

Metis	1
Treaty/Status	2
Inuit	3

11. Have you ever lived on a reserve?

Yes	1
No	2

12. Have you ever lived on a Metis Settlement/ Colony?

Yes	1
No	2

Appendix D

Career Factor Checklist (Original)

CAREER FACTOR CHECKLIST

NAME: _____

SOCIAL SECURITY NUMBER _____

STUDENT NUMBER _____

Please check the information below about yourself:

Sex: Male _____ Female _____

Grade Level: High School ____ Freshman ____

Sophomore ____ Junior ____ Senior ____

Graduate ____ Special Student ____

Working Adult ____

Age: ____

INSTRUCTIONS: Below are a number of factors that may affect your career decisions. Indicate the degree that you think each of the factors affects **YOUR OWN CAREER DECISION MAKING** using the following scale. Mark the unsure category (1) only if you are completely unaware or have never thought of how the factors have affected your career decision making.

Degree of Effect on Your Career Decision Making

Strong Effect	Moderate Effect	Weak Effect	No Effect	Unsure of Effect
5	4	3	2	1

___ 1. Familial Factors. Your family's values, attitudes and behaviors regarding appropriate career choices.

___ 2. Childhood Experience. Your early childhood experiences regarding appropriate career choices.

___ 3. Mother's Role Model. Your mother's roles and attitudes related to family, career and work.

___ 4. Father's Role Model. Your father's roles and attitudes related to family, career and work.

Please turn sheet over...

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Degree of Effect on Your Career Decision Making				
Strong Effect	Moderate Effect	Weak Effect	No Effect	Unsure of Effect
5	4	3	2	1

___ 5. Societal Factors. Society's values, attitudes, and practises related to appropriate career choices.

___ 6. Educational Experiences. Educational institutions' values, attitudes, and practices related to appropriate career choices.

___ 7. Peer Group Influences. Values, attitudes, and behaviors of your peers regarding appropriate career choices.

___ 8. Mass Media. Values, attitudes, and behaviors depicted on radio and TV and movies, books, and magazines regarding appropriate career choices.

___ 9. Individual Factors. Your abilities, interests, self-expectancies, attitudes, and need to achieve.

___ 10. Self-Expectancies. What you expect of yourself related to possible careers now and in the future.

___ 11. Abilities. All skills you have or can develop.

___ 12. Interests. Specific activities and areas that arouse your curiosity or attention.

___ 13. Need to Achieve. Your desire to accomplish certain goals in life.

___ 14. Attitudes. Your perceptions and feelings about yourself and your role related to others.

___ 15. Socioeconomic Factors. Your social, racial, and ethnic group and society's economic condition.

___ 16. Social Class. The social and economic level of you and your family.

___ 17. Race. Your skin color or ethnic origins.

___ 18. Sex Discrimination. Your experience of personal and societal discrimination on the basis of sex.

___ 19. Supply and Demand of Jobs. Availability of jobs.

Please turn sheet over...

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Degree of Effect on Your Career Decision Making				
Strong Effect 5	Moderate Effect 4	Weak Effect 3	No Effect 2	Unsure of Effect 1

___ 20. Situational Factor. Unforeseen circumstances and events.

___ 21. Chance. Unplanned or unpredictable events.

___ 22. Course of Lease Resistance. Available options offering the least resistance, hard work, or difficulty.

___ 23. Psychosocial-Emotional Barriers. Emotional, social, or personal problems that you have in your life.

___ 24. Fear of Failure. Fear of being seen or judged as inadequate and unsuccessful.

___ 25. Fear of Success. Avoiding success because of possible negative consequences.

___ 26. Lack of Assertiveness. Lack of initiative to express yourself and to act in your own best interest.

___ 27. Lack of Confidence. Lack of trust in your abilities and potential to be a success.

___ 28. Role of Conflict. Feelings of frustration over being pulled in opposite directions by your roles (such as career vs. family, career, vs. parents' approval-disapproval, career vs. role as father, mother, wife, or husband).

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Appendix E

Ethics Committee Approval

4 December, 1989

From: Department of Educational Psychology
Research and Ethics Committee

The Research and Ethics Committee of the Department of Educational Psychology has reviewed the attached proposal and finds it acceptable with respect to ethical matters.

Applicants: Dr. H. Zingle on behalf of Carl M. Paproski (graduate student).

Title: The Opinions of Native and Non-native Edmonton High School Students on Factors Influencing Career Decision Making.

Participating Agencies:

Edmonton Public School System
Edmonton Catholic School System

The research committee and ethics review committee at Alberta Hospital have approved this research project.

Recommended Change:

Chairman or Designate, Research and Ethics Committee

Date

Appendix F

Edmonton Separate (Catholic) School Board Approval

Edmonton
Catholic
Schools

Administration Centre
9807 - 106 Street, Edmonton, Alberta T5K 1C2

Telephone (403) 441-6000
Fax (403) 425-8759

December 13, 1989

Mr. A. Kiffiak
Room 241 Education South
University of Alberta
Edmonton, Alberta
T6G 2G5

Dear Mr. Kiffiak:

RE: Request by Dr. H. Zingle on behalf of Mr. Carl Paproski: The Opinions of Native and Non-Native Edmonton High School Students on Factors Influencing Career Decision Making.

The above request is approved by the Edmonton Catholic School District.

Mr. Leith Campbell - Consultant, Native Education has reviewed the research proposal and is in agreement that data collected would be valuable in the area of career counselling.

Principals from the suggested schools have been notified of the study and can be approached by Mr. Paproski to request participation.

Research findings should be directed to Mr. Leith Campbell and participating schools.

My wishes to Mr. Paproski for a most successful study.

Yours truly,

Annette Stremecki
Coordinator Testing & Research
Department of Planning & Support Services

/dld

cc: Dr. H. Zingle
cc: Mr. Carl Paproski
cc: Mr. Leith Campbell

Appendix G

Edmonton Public School Board Approval

EDMONTON PUBLIC SCHOOLS

December 14, 1989 (File #037)

BOARD OF TRUSTEES
Joan Cowing
Chairman
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SUPERINTENDENT OF SCHOOLS
Michael A. Strembitsky

EXECUTIVE ASSISTANT TO SUPERINTENDENT
Maria Auletta

ASSOCIATE SUPERINTENDENTS
Dan Assaf-Smith
Pat Campbell
Ken Gardner
Ruth LeBlanc
Bruce McMillan
Ron McPhee
Lloyd Pearson
George Rice
George Trainor

Mr. W. A. Kiffiak
School Liaison Officer
Division of Field Services
University of Alberta
Edmonton, Ab
T6G 2G5

Dear Mr. Kiffiak:

Re: Research Request: The Opinions of Native & Non-native Edmonton High School Students on factors Influencing Career Decision-Making: Carl Paproski

The above research request has been approved on a permissive basis following examination by our department. The approval is subject to the following conditions:

1. Teacher and student participation in the study to be voluntary;
2. Students are free to withdraw at any time;
3. The results of the study will be provided to the teacher; and
4. Anonymity of the students and the confidentiality of information obtained is assured.

Carl Paproski should now contact:

Gerry Tobert, principal, Jasper Place Composite High School
Denis Blakeman, principal, Victoria Composite High School
Ben Mack, principal, W.P. Wagner High School

Identification of "Native Student" will be left to the descretion of the principals involved and Carl Paproski.

CENTRE FOR EDUCATION
One Kingsway
Edmonton, Alberta T5H 4C9
Tel: (403) 429-8000 Fax: (403) 429-8318

The district would appreciate receiving a copy of the study results as they become available.

Yours sincerely,

Simon Van der Valk
Supervisor Monitoring

LW/lg

cc: Carl Paproski
Gerry Tobert, principal, Jasper Place Composite High School
Denis Blakeman, principal, Victoria Composite High School
Ben Mack, principal, W.P. Wagner High School

Appendix H

Instructions to Students

Instructions to be read to all subjects participating in study.

Before giving the student the questionnaires, please read these instructions to each group of participants.

Thank you for being here. You have been selected from all students in the Edmonton Catholic and Public School systems to particiapte in a study by a University of Alberta graduate student, Carl Paproski. His research deals with career decision making and how students from different cultures look at career decisions.

The specific questions you will be asked deal with the following:

(1) Background information
(2) What you value as important in life
(3) What may be important to you in making career decisions

You are being asked to volunteer about 35 minutes of your time today. It is your choice to participate - you do not have to participate if you do not wish to.

All information you give will be kept confidential. NO NAMES WILL BE USED IN THIS STUDY.

Please answer <u>all</u> of the questions and read the directions carefully. Ask if you are not clear on a question or have any other questions.

Please begin when I give you your papers. Feel free to leave when you are finished.

Thank you very much for your assistance and your cooperation.

Appendix I

Covering Letter

November 1989

7508 - 142A Street
Edmonton, Alberta
T5R 0N4

Dear Student:

I require and ask for your assistance in order to complete my Doctoral Degree in Educational Psychology at the University of Alberta. Your time in completing the attached questionnaires will be extremely valuable and most appreciated.

Please be assured that your name will remain confidential and will not be used in this research.

My research deals with the relationship of culture (one's beliefs, values, way of life, etc.) to how career decisions are made. A career can be considered the totality of work one does in a lifetime.

The questions are asked to determine background information, your opinion of what you value as important in life and what factors are important to you in making career decisions.

Although some questions may be difficult I would ask you to answer every question. Your complete honesty is also most important.

If you would like a copy of the results of the completed research, please provide me with your home address and postal code on the spaces below.

Thank you for your time and effort.

Yours truly,

Carl Paproski

Carl M. Paproski

Please send copy of the study results to:

NAME _____

ADDRESS _____

CITY _____

POSTAL CODE _____